

## **Description of Data Elements**

### **HCUP State Emergency Department Databases (SEDD)**

This document contains cumulative descriptions of data elements across all HCUP Central Distributor states and years of HCUP data from 1996 to the current data year.

Not all data elements are uniformly coded or available across all the states. Please check the "State Specific Notes" section for each data element before analysis.

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## AGE - Age in years at admission

<b>General Notes</b>
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Age in years (AGE) is calculated from the birth date (DOB) and the admission date (ADATE) with the following exceptions:

- AGE is set to the supplied age if the age cannot be calculated (ADATE and/or DOB is missing or invalid). Note: If the supplied age is the age at discharge instead of the age at admission, then the supplied age is NOT used.
- AGE is missing (.) if the age cannot be calculated and the supplied age is missing.
- AGE is invalid (.A) if
  - it is out of range (AGE NE 0-124) or
  - the age cannot be calculated and the supplied age is nonnumeric.

An invalid calculated AGE is not replaced by the supplied age.

- If the data source does not provide the necessary dates to calculate age or the reported age at admission, then beginning in the 1998 data, AGE is not present on the HCUP files. In the 1988-1997 data, AGE is retained on the HCUP files and is set to unavailable from source (.B).
- AGE is set to inconsistent (.C) if one of the HCUP edit checks is triggered. The age edit checks vary by year.
  - Beginning in the 1998 data, AGE is less than 0 (EAGE02), is greater than 124 (EAGE03), is inconsistent with neonatal diagnoses (EAGE04), or is inconsistent with maternal diagnoses/procedures (EAGE05).
  - In the 1988-1997 data, AGE is inconsistent with AGEDAY (ED021), neonatal diagnoses (ED3nn), maternal diagnoses (ED4nn), or maternal procedures (ED5nn).

When processing the 1996 HCUP data, no adjustment was made for the leap year when age was calculated from date of birth and admission date. This caused infants admitted on the day before their first birthday to have AGE=1 instead of AGE.

Uniform Values			
Variable	Description	Value	Value Description
AGE	Age in years at admission	0-124	Age in years
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: beginning with 1998 data, EAGE02, EAGE03, EAGE04, EAGE05; in 1988-1997 data, ED021, ED3nn, ED4nnn, ED5nn

State Specific Notes
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### Nebraska

Only the calculated age in years could be used to assign AGE because Nebraska did not supply this information.

### Utah

The reported age was not used when AGE could not be calculated because Utah supplied age at discharge.

## AGEDAY - Age in days (when AGE is less than 1 year)

<b>General Notes</b>
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Age in days (AGEDAY) is reported for patients less than 1 year old. AGEDAY is calculated from date of birth (DOB) and the admission date (ADATE) with the following exceptions:

- AGEDAY is set to the supplied age in days if the age cannot be calculated (ADATE and/or DOB is missing or invalid).
- AGEDAY is missing (.) if the age cannot be calculated and the reported age in days is missing.
- AGEDAY is missing (.) if the calculated age in years is out of range (AGE NE 0-124).
- AGEDAY is invalid (.A) if the age in days cannot be calculated and the supplied age in days is nonnumeric. An invalid calculated AGEDAY is not replaced by the reported age in days.
- If the data source does not provide the necessary dates to calculate age in days or the reported age in days, then beginning in the 1998 data, AGEDAY is not present on the HCUP files. In the 1988-1997 data, AGEDAY is retained on the HCUP files and is set to unavailable from source (.B).
- AGEDAY is set to inconsistent (.C) if one of the HCUP edit checks is triggered. The age edit checks vary by year.
  - Beginning in the 1998 data, AGEDAY is inconsistent with neonatal diagnoses (EAGE04), or is inconsistent with maternal diagnoses/procedures (EAGE05).
  - In the 1998-1997 data, AGEDAY is inconsistent with AGE (ED021), neonatal diagnoses (ED3nn), maternal diagnoses (ED4nn), or maternal procedures (ED5nn).

When processing the 1996 HCUP inpatient data, no adjustment was made for the leap year when age was calculated from date of birth and admission date. This caused infants admitted on the day before their first birthday to have AGE=1 and AGEDAY = missing (.), instead of AGE=0 and AGEDAY=364.

Uniform Values			
Variable	Description	Value	Value Description
AGEDAY	Age in days (when AGE is less than 1 year)	0-364	Days
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: beginning with 1998 data, EAGE04, EAGE05; in 1988-1997 data, ED021, ED3nn, ED4nnn, ED5nn

State Specific Notes
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### Maine

Only the calculated age could be used to assign AGEDAY because Maine did not supply age in days.

### Nebraska

Only the calculated age in days could be used to assign AGEDAY because Nebraska did not supply this information.

### Utah

Only the calculated age could be used to assign AGEDAY because Utah did not supply age in days.



## AGEMONTH - Age in months (when AGE is less than 11 years)

### General Notes

Age in months (AGEMONTH) is reported for patients less than 11 years of age. AGEMONTH is calculated from date of birth (DOB) and the admission date (ADATE) with the following exceptions:

- AGEMONTH is set to the supplied age in months if the age cannot be calculated (ADATE and/or DOB is missing or invalid).
- AGEMONTH is missing (.) if the age cannot be calculated and the reported age in months is missing.
- AGEMONTH is missing (.) if the calculated age in years is out of range (AGE NE 0-124).
- AGEMONTH is invalid (.A) if the age in months cannot be calculated and the supplied age in months is nonnumeric. An invalid calculated AGEMONTH is not replaced by the reported age in months.
- AGEMONTH is set to inconsistent (.C) if AGEMONTH is inconsistent with neonatal diagnoses (EAGE04), or is inconsistent with maternal diagnoses/procedures (EAGE05).

### Uniform Values

Variable	Description	Value	Value Description
AGEMONTH	Age in months (when AGE is less than 11 years)	0-131	Months
		.	Missing
		.A	Invalid
		.C	Inconsistent: beginning with 1998 data, EAGE04, EAGE05

### State Specific Notes

#### Nebraska

Only the calculated age in months could be used to assign AGEMONTH because Nebraska did not supply this information.

## AHAID - AHA hospital identifier

### General Notes

There are up to three different types of hospital identifiers included in the HCUP databases.

- The data source's own number scheme for identifying hospitals and facilities (DSHOSPID),
- The hospital identifier used by the American Hospital Association (AHAID and IDNUMBER), and
- A unique HCUP hospital identifier (HOSPID).

The hospital entity as defined by the data source may differ from the hospital entity as defined by the AHA. For example, the data source treats two separate facilities as two hospitals, while the AHA Annual Survey treats the two facilities as a single hospital, or vice versa. For consistency across states, HCUP defines hospitals in accordance with the American Hospital Association Annual Survey of Hospitals. During HCUP data processing, the data source's identification of the hospital is reconciled with the identification of the hospital in the AHA Annual Survey of Hospitals. For detailed information about this linking process, see the special report on HCUP Hospital Identifiers.

The hospital identifier (AHAID) contains the 7-digit American Hospital Association (AHA) hospital identifier that the AHA uses on their yearly AHA Annual Survey of Hospitals data files. These files contain information about hospital characteristics and are available for purchase through the AHA.

AHAID is missing for some hospitals because an AHA hospital identifier cannot be determined. Hospitals may not be registered with the AHA or the source-provided information cannot be linked to the AHA.

The data element AHAID is available in the Hospital file.

Uniform Values			
Variable	Description	Value	Value Description
AHAID	AHA hospital identifier	7(n)	AHA hospital identifier with a leading 6
		Blank	Missing

<b>State Specific Notes</b>
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*None*

## AHOUR - Admission hour

### General Notes

Admission hour (AHOUR) is coded in military time (e.g., 2:45 p.m. is represented as 1445). Invalid times are set to invalid (.A). No other edit checks are performed on this data element during HCUP processing.

### Uniform Values

Variable	Description	Value	Value Description
AHOUR	Admission hour	HHMM	Admission hour
		.	Missing
		.A	Invalid

### State Specific Notes

#### Nebraska

Nebraska provided the hour of admission, but not the minutes. During HCUP data processing, the minutes were imputed to be "00".

## AMONTH - Admission month

### General Notes

Admission month (AMONTH) is derived from either the month of the admission date or the supplied admission month. A valid nonmissing month is assigned to AMONTH even if the admission year or day is invalid or missing. Therefore, it is possible to have a valid AMONTH when the admission date is invalid or missing.

If AMONTH is nonnumeric or out of range (month NE 1-12), then AMONTH is invalid (.A).

If the data source does not provide the admission month, then beginning in the 1998 data, AMONTH is not present on the HCUP files. In the 1988-1997 data, AMONTH is retained on the HCUP files and is set to unavailable from source (.B).

### Uniform Values

Variable	Description	Value	Value Description
AMONTH	Admission month	1-12	Admit month
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)

### State Specific Notes

*None*

## APG - Ambulatory Patient Group, as received from data source

### General Notes

The data element APG contains the Ambulatory Patient Group provided by the data source that is associated with the Current Procedural Terminology (CPT) procedure code or Healthcare Common Procedure Coding System (HCPCS) procedure code stored in the HCUP data element CPTHCPSCS. No edit checks are performed on this data element during HCUP data processing.

### Uniform Values

Variable	Description	Value	Value Description
APG	Ambulatory Patient Group, as received from data source	3(n)	APG value
		.	Missing

### State Specific Notes

*None*

## ASOURCE - Admission source, uniform coding

### General Notes

Three HCUP data elements contain information on the source of admission:

- ASOURCEUB92 (available beginning in 2002 data) indicates the source of admission and uses the same coding as the source of admission data element on the UB-92 claim form. ASOURCEUB92 has more detailed categories for routine admissions and transfers from other health facilities than the HCUP data element ASOURCE. Some states do not provide enough detail in the coding of the source of admission to accurately code ASOURCEUB92. For these states, the data element ASOURCEUB92 is not available.
- ASOURCE (available for all data years) indicates the source of the admission (emergency department; transfer from a hospital; routine, birth and other; etc.) recoded into HCUP uniform values. Routine, birth, and other (ASOURCE=5) include referrals from physicians, clinics, and HMOs. Transfer from a hospital may include transfers within the same hospital as well as transfers between hospitals. If the data source does not provide the admission source, then beginning in the 1998 data, ASOURCE is not present on the HCUP files. In the 1988-1997 data, ASOURCE is retained on the HCUP files and is set to unavailable from source (.B).
- ASOURCE\_X (available beginning in 1998 data) retains the source of admission as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific. ASOURCE\_X is available for all states that provide HCUP with information on admission source.

If the state includes enough detail in the coding of the source of admission to accurately code ASOURCEUB92, then the HCUP data element ASOURCE is coded from ASOURCEUB92 as specified below. Otherwise, ASOURCE is coded from ASOURCE\_X and specifications are listed under State Specific Notes.

Coding of ASOURCEUB92 into ASOURCE			
ASOURCEUB92		ASOURCE	
Value	Description	Value	Description
7	Emergency room	1	Emergency department
4	Transfer from an acute care hospital	2	Another hospital
A	Transfer from a rural primary care hospital		

5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Outpatient or Clinic		
3	HMO		
2	Outpatient or Clinic		
1	Normal delivery (if ATYPE = 4)		
2	Premature delivery (if ATYPE = 4)		
3	Sick baby (if ATYPE = 4)		
4	Extramural birth (if ATYPE = 4)		
Blank	Unknown, Missing, Invalid	.	Missing

#### Uniform Values

Variable	Description	Value	Value Description
ASOURCE	Admission source, uniform coding	1	Emergency department
		2	Another hospital
		3	Another health facility including long term care
		4	Court/Law enforcement
		5	Routine, birth, and other
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)

#### State Specific Notes

#### Massachusetts



Massachusetts			
ASOURCE_X		ASOURCE	
Value	Description	Value	Description
7	Outside hospital emergency room	1	Emergency department
4	Transfer from an acute hospital	2	Another hospital
5	Transfer from a skilled nursing facility (SNF)	3	Other health facility including long-term care
6	Transfer from Intermediate Care Facility (ICF)		
T	Transfer from another institution's ambulatory surgery (SDS)		
Y	Within hospital ambulatory surgery transfer (SDS transfer)		
8	Court/Law enforcement	4	Court/Law enforcement
1	Direct physician referral	5	Routine including births and other sources
2	Within hospital clinic referral		
3	Direct health plan referral / HMO referral		
L	Outside hospital clinic referral		
M	Walk-in / Self Referral		
9	Other		
E	EMS transport decision		
A	Normal delivery		
B	Premature delivery		
C	Sick baby		
D	Extramural birth		
-, 0, Z, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
There is not enough detail in the coding of ASOURCE_X to code the HCUP variable ASOURCEUB92.			

## Maine

Maine			
(Prior to 2002)			
ASOURCE_X		ASOURCE	
Value	Description	Value	Description
7	Emergency room	1	Emergency department
4	Transfer from a hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
9, Blank	Information not available, Missing	.	Missing
Any other values not documented by the data source		.A	Invalid

## Nebraska

Nebraska			
(Prior to 2002)			
ASOURCE_X		ASOURCE	
Value	Description	Value	Description
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
A	Transfer from critical access hospital		
6	Transfer from another health care facility other than an acute care facility	3	Other health facility including long-term care
B	Transfer from another home health agency		
C	Readmission to same home health agency		
1	Physician referral	5	Routine including births and other sources
2	Clinic referral		

3	HMO referral		
1	Normal delivery (if ATYPE=4)		
2	Premature (if ATYPE=4)		
3	Sick baby (if ATYPE=4)		
4	Extramural birth (if ATYPE=4)		
9, Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

## Utah

Utah			
(Prior to 2002)			
ASOURCE_X		ASOURCE	
Value	Description	Value	Description
7	Emergency room	1	Emergency department
4	Transfer from hospital	2	Another hospital
5	Transfer from a skilled nursing facility	3	Other health facility including long-term care
6	Transfer from another health care facility		
8	Court/Law enforcement	4	Court/Law enforcement
1	Physician Referral	5	Routine including births and other sources
2	Clinic referral		
3	HMO referral		
1	Normal newborn (if ATYPE=4) (This is not available in the SASD)		
2	Premature delivery (if ATYPE=4) (This is not available in the SASD)		
3	Sick baby (if ATYPE=4) (This is not available in the SASD)		
4	Extramural birth (if ATYPE=4) (This is not available in the SASD)		
0	Newborn		
9,	Unknown, Missing	.	Missing

Blank			
Any values not documented by the data source		.A	Invalid
<p>SID and SEDD: Admission source information was provided in two fields; one for newborns and one for all other patients. ASOURCE_X was assigned as follows:</p> <p style="padding-left: 40px;">If a newborn record (ATYPE=4) then ASOURCE_X = the newborn admission source,</p> <p style="padding-left: 40px;">Else ASOURCE_X = the admission source for non-newborns.</p> <p>SASD: Only the non-newborn admission source was provided.</p>			

## ASOURCE\_X - Admission source, as received from source

### General Notes

Three HCUP data elements contain information on the source of admission:

- ASOURCEUB92 (available beginning in 2002 data) indicates the source of admission and uses the same coding as the source of admission data element on the UB-92 claim form. ASOURCEUB92 has more detailed categories for routine admissions and transfers from other health facilities than the HCUP data element ASOURCE. Some states do not provide enough detail in the coding of the source of admission to accurately code ASOURCEUB92. For these states, the data element ASOURCEUB92 is not available.
- ASOURCE (available for all data years) indicates the source of the admission (emergency department; transfer from a hospital; routine, birth and other; etc.) recoded into HCUP uniform values. Routine, birth, and other (ASOURCE=5) include referrals from physicians, clinics, and HMOs. Transfer from a hospital may include transfers within the same hospital as well as transfers between hospitals. If the data source does not provide the admission source, then beginning in the 1998 data, ASOURCE is not present on the HCUP files. In the 1988-1997 data, ASOURCE is retained on the HCUP files and is set to unavailable from source (.B).
- ASOURCE\_X (available beginning in 1998 data) retains the source of admission as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific. ASOURCE\_X is available for all states that provide HCUP with information on admission source.

### Uniform Values

Variable	Description	Value	Value Description
ASOURCE_X	Admission source, as received from source	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element ASOURCE and ASOURCEUB92.

## ASOURCEUB92 - Admission source, (UB-92 standard coding)

### General Notes

Three HCUP data elements contain information on the source of admission:

- ASOURCEUB92 (available beginning in 2002 for HCUP data in general, and in 2003 for the NIS) indicates the source of admission and uses the same coding as the source of admission data element on the UB-92 claim form. ASOURCEUB92 has more detailed categories for routine admissions and transfers from other health facilities than the HCUP data element ASOURCE. Some states do not provide enough detail in the coding of the source of admission to accurately code ASOURCEUB92. For these states, the data element ASOURCEUB92 is not available.
- ASOURCE (available for all data years) indicates the source of the admission (emergency department; transfer from a hospital; routine, birth and other; etc.) recoded into HCUP uniform values. Routine, birth, and other (ASOURCE=5) include referrals from physicians, clinics, and HMOs. Transfer from a hospital may include transfers within the same hospital as well as transfers between hospitals. If the data source does not provide the admission source, then beginning in the 1998 data, ASOURCE is not present on the HCUP files. In the 1988-1997 data, ASOURCE is retained on the HCUP files and is set to unavailable from source (.B).
- ASOURCE\_X (available beginning in 1998 data) retains the source of admission as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific. ASOURCE\_X is available for all states that provide HCUP with information on admission source.

Uniform Values			
Variable	Description	Value	Value Description
ASOURCEUB92	Admission source, (UB-92 standard coding)	1	If non-newborn admissions (ATYPE NE 4) Physician referral
		2	If non-newborn admissions (ATYPE NE 4) Clinic referral
		3	If non-newborn admissions (ATYPE NE 4) HMO referral
		4	If non-newborn admissions (ATYPE NE 4) Transfer from a hospital
		5	If non-newborn admissions (ATYPE NE

			4) Transfer from a skilled nursing facility
		6	If non-newborn admissions (ATYPE NE 4) Transfer from another health facility
		7	If non-newborn admissions (ATYPE NE 4) Emergency room
		8	If non-newborn admissions (ATYPE NE 4) Court/Law enforcement
		A	If non-newborn admissions (ATYPE NE 4) Transfer from a Critical Access hospital
		.	If non-newborn admissions (ATYPE NE 4) Missing/Invalid
		1	If newborn admissions (ATYPE = 4) Normal newborn
		2	If newborn admissions (ATYPE = 4) Premature delivery
		3	If newborn admissions (ATYPE = 4) Sick baby
		4	If newborn admissions (ATYPE = 4) Extramural birth
		.	If newborn admissions (ATYPE = 4) Missing/Invalid

<b>State Specific Notes</b>
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# Maine

Maine			
(Beginning in 2002)			
ASOURCE_X		ASOURCEUB92	
Value	Description	Value	Description
Non-newborn admissions (ATYPE NE 4)			
1	Physician referral	1	Physician referral
2	Clinic referral	2	Clinic referral
3	HMO referral	3	HMO referral
4	Transfer from a hospital	4	Transfer from a hospital
5	Transfer from a skilled nursing facility	5	Transfer from a skilled nursing facility



6	Transfer from another health care facility	6	Transfer from another health care facility
7	Emergency room	7	Emergency room
8	Court/Law enforcement	8	Court/Law enforcement
A	Transfer from a Critical Access hospital	A	Transfer from a Critical Access hospital
9, Blank	Missing	.	Missing or Invalid
<b>Newborn Admissions (TYPE = 4)</b>			
1	Normal birth	1	Normal newborn
2	Premature birth	2	Premature delivery
3	Sick baby	3	Sick baby
4	Extramural birth	4	Extramural birth
9, blank	Missing	.	Missing or Invalid
ASOURCE is coded directly from ASOURCEUB92.			

## Nebraska

Nebraska			
(Beginning in 2002)			
ASOURCE_X		ASOURCEUB92	
Value	Description	Value	Description
Non-newborn admissions (ATYPE NE 4)			
1	Physician referral	1	Physician referral
2	Clinic referral	2	Clinic referral
3	HMO referral	3	HMO referral
4	Transfer from a hospital	4	Transfer from a hospital
5	Transfer from a skilled nursing facility	5	Transfer from a skilled nursing facility
6	Transfer from another health care facility	6	Transfer from another health care facility
B	Transfer from another home health agency		
C	Readmission to same home health agency		
7	Emergency room	7	Emergency room
8	Court/Law enforcement	8	Court/Law enforcement

A	Transfer from a critical access hospital	A	Transfer from a Critical Access hospital
0, 9, Blank	Missing	.	Missing or Invalid
<b>Newborn Admission (TYPE = 4)</b>			
1	Normal delivery	1	Normal newborn
2	Premature delivery	2	Premature delivery
3	Sick baby	3	Sick baby
4	Extramural birth	4	Extramural birth
0, 9, Blank	Missing	.	Missing or Invalid
ASOURCE is coded directly from ASOURCEUB92.			

## Utah

Utah			
(Beginning in 2002)			
ASOURCE_X		ASOURCEUB92	
Value	Description	Value	Description
Non-newborn admissions (ATYPE NE 4)			
1	Physician referral	1	Physician referral
2	Clinic referral	2	Clinic referral
3	HMO referral	3	HMO referral
4	Transfer from a hospital	4	Transfer from a hospital
5	Transfer from skilled nursing facility	5	Transfer from a skilled nursing facility
6	Transfer from another health care facility	6	Transfer from another health care facility
7	Emergency room	7	Emergency room
8	Court/Law enforcement	8	Court/Law enforcement
--	--	A	Transfer from a Critical Access hospital
0, 9, Blank, any undocumented values	Information not available, missing	.	Missing or Invalid
Newborn Admission (TYPE = 4)			

1	Normal delivery	1	Normal newborn
2	Premature delivery	2	Premature delivery
3	Sick baby	3	Sick baby
4	Extramural birth	4	Extramural birth
0, 9, Blank, any undocumented values	Invalid, Missing	.	Missing or Invalid
<p>SID: Admission source information was provided in two fields: one for newborns and one for all other patients. ASOURCE_X was assigned as follows:</p> <p style="padding-left: 40px;">If a new born record (ATYPE=4) then ASOURCE_X = the newborn admission source.</p> <p style="padding-left: 40px;">Else ASOURCE_X = the admission source for non-newborns</p>			
<p>SASD: Admission source is provided in one field for all patients.</p>			

## ATYPE - Admission type

### General Notes

ATYPE indicates the type of admission (emergency, urgent, elective, etc.). Newborn admission types are separated only if that information is available from the data source. No edit check comparing the admission type to diagnosis or procedure codes is performed.

Because it is infrequently available from data sources, the admission type of delivery (ATYPE=5) is discontinued beginning in the 1998 data. If available, deliveries are recoded under urgent (ATYPE=2).

### Uniform Values

Variable	Description	Value	Value Description
ATYPE	Admission type	1	Emergency
		2	Urgent
		3	Elective
		4	Newborn
		5	Delivery (coded in 1988-1997 data only)
		5	Trauma Center (beginning in 2003)
		6	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)

### State Specific Notes

#### Nebraska

The source value for Trauma Center (value 5) was recoded to Other (ATYPE=6) in 2002. Beginning in 2003, this source value was recoded to Trauma Center (ATYPE=5) for inpatient and outpatient data.

Nebraska does not separately classify deliveries. The source documentation supplied by Nebraska does not indicate which source categories were used for deliveries.

## **Utah**

Utah does not separately classify deliveries nor do they have a separate category for "Other." The source documentation available for Utah does not describe which admission type(s) were used for these categories.

## AWEEKEND - Admission day is on a weekend

### General Notes

An indicator of whether the admission day is on the weekend (AWEEKEND) is calculated from the admission date (ADATE). If AWEEKEND cannot be calculated (ADATE is missing or invalid), then

- AWEEKEND is missing (.) if ADATE is missing (.) or
- AWEEKEND is invalid (.A) if ADATE is invalid (.A).

Beginning in the 1998 HCUP files, the data element ADAYWK is replaced by admission weekend (AWEEKEND).

### Uniform Values

Variable	Description	Value	Value Description
AWEEKEND	Admission day is on a weekend	0	Admitted Monday-Friday
		1	Admitted Saturday-Sunday
		.	Missing
		.A	Invalid

### State Specific Notes

#### Maryland

During HCUP processing, ADAYWK was assigned using the reported admission day of week if the day could not be calculated from admission date.

## AYEAR - Admission year

### General Notes

Admission year (AYEAR) is derived from the admission date (ADATE). If ADATE is missing, then AYEAR is missing (.). If ADATE is invalid, then AYEAR is invalid (.A).

### Uniform Values

Variable	Description	Value	Value Description
AYEAR	Admission year	yyyy	Admission year
		.	Missing
		.A	Invalid

### State Specific Notes

*None*

## BILLTYPE - Type of bill, UB-92 coding

### General Notes

Bill type is retained as provided by the data source. We expect that the information is coded according to UB-92 regulations, but no edit checks are performed on this data element during HCUP processing. The first digit indicates type of facility, the second digit indicates bill classification, and the third digit indicates frequency. Examples of bill types typically seen in the HCUP data are listed below. Refer to a UB-92 manual for the complete list of values.

#### Sample Values for Bill Type

111	Hospital - Inpatient (Including Medicare Part A) - Admit Through Discharge Claims
121	Hospital - Inpatient (Medicare Part B Only) - Admit Through Discharge Claims
131	Hospital - Outpatient - Admit Through Discharge Claims
831	Special Facility - Ambulatory Surgery Center - Admit Through Discharge Claims
851	Special Facility - Critical Access Hospital - Admit Through Discharge Claims

### Uniform Values

Variable	Description	Value	Value Description
BILLTYPE	Type of bill, UB-92 coding	Aaa	UB-92 bill type code
		Blank	Missing

### State Specific Notes

*None*



## BMONTH - Birth month

### General Notes

Birth month (BMONTH) is derived from the date of birth (DOB). If DOB is missing, then BMONTH is missing (.). If DOB is invalid, then BMONTH is invalid (.A).

### Uniform Values

Variable	Description	Value	Value Description
BMONTH	Birth month	1-12	Birth month
		.	Missing
		.A	Invalid

### State Specific Notes

*None*

## BYEAR - Birth year

### General Notes

Birth year (BYEAR) is derived from the date of birth (DOB). If DOB is missing, then BYEAR is missing (.). If DOB is invalid, then BYEAR is invalid (.A).

### Uniform Values

Variable	Description	Value	Value Description
BYEAR	Birth year	yyyy	Birth year
		.	Missing
		.A	Invalid

### State Specific Notes

*None*

## CHGn - Detailed charges

### General Notes

Detailed charges are submitted charges that pertain to a specified revenue center or group of revenue centers. Detailed charges (CHGn) are retained as provided by the data source, including cents and negative values. Zero charges are retained as a zero and are NOT set to missing (.). Charges greater than \$9,999,999 are set to invalid (.A). No edit checks are performed on this data element during HCUP processing.

### Uniform Values

Variable	Description	Value	Value Description
CHGn	Detailed charges	+/- 7(n).nn	Charges
		.	Missing
		.A	Invalid

### State Specific Notes

#### Maryland

Detailed charges (CHGn) pertain to identified revenue centers as indicated by the revenue code (REVCDn) and the units of service (UNITn) , but not to the CPT procedure codes in CPTn. For example, CHG1 pertains to the revenue center coded in REVCD1 and the units of service specified in UNIT1.

#### Utah

The charge categories for Utah are:

CHG1	Facility charges (revenue codes 10x-94x)
CHG2	Professional charges (revenue codes 95x-98x)
CHG3	Emergency department charges (revenue codes 45x) (beginning in 2002 in the SID and 2001 in the SEDD)

## CHARGE - Line item charge as received from source

### General Notes

Line item charge (CHARGE) is the submitted charge that pertains to a specified revenue center. Line item charge (CHARGE) is retained as provided by the data source. No edit checks are performed on this data element during HCUP processing. Beginning with 2004 data, the charge for total (revenue code 0001) was retained. Prior to 2004, the charge for the total was often removed.

CHARGE is contained in a line item charge detail file. There may be multiple observations in the file with the same revenue code for a discharge record. To identify the total charge and units of service to specific revenue centers, the line item charge (CHARGE) and unit detail (UNITS) for a discharge should be summarized by revenue code (REVCODE) and the HCUP variable KEY which uniquely identifies a discharge. KEY can also be used to merge the detail charge information onto the discharge record in the Core file.

### Uniform Values

Variable	Description	Value	Value Description
CHARGE	Line item charge as received from source	+/- 7(n).nn	Charge
		.	Missing
		.A	Invalid

### State Specific Notes

*None*

## CPTHCPCS - Line item CPT or HCPCS procedure code as received from source

### General Notes

CPT or HCPCS procedure codes are frequently used on outpatient bills. The procedure code pertains to a specified revenue code and line item charge. Line item CPT or HCPCS procedure codes (CPTHCPCS) are retained as provided by the data source. No edit checks are performed on this data element during HCUP processing.

### Uniform Values

Variable	Description	Value	Value Description
CPTHCPCS	Line item CPT or HCPCS procedure code as received from source	5(a)	CPT or HCPCS Procedure Code
		Blank	Missing

### State Specific Notes

#### Maine

Maine provided the information of CPT and HCPCS on the line item charge detail instead of the discharge record. Because Maine provided line item charge detail, there may be multiple observations with the same CPT/HCPCS code for a discharge record in the Maine charge file. The HCUP variable KEY which uniquely identifies a discharge can be used to merge the CPT/HCPCS onto the discharge record in the Core file.

#### Nebraska

Nebraska provided the information of CPT and HCPCS on the line item charge detail instead of the discharge record. Because Nebraska provided line item charge detail, there may be multiple observations with the same CPT/HCPCS code for a discharge record in the Nebraska charge file. The HCUP variable KEY which uniquely identifies a discharge can be used to merge the CPT/HCPCS onto the discharge record in the Core file.

## CPTn - CPT-4/HCPSC procedures

### General Notes

CPT-4/HCPSC procedures code data elements (CPTn) contain the original values supplied by the data source, except that null values are set to blank. Codes are not validated and the information contained in them is not used for edit checking the consistency of patient's age and sex with procedures.

The original value of the primary CPT-4/HCPSC procedure (CPT1), whether blank or coded, is retained in the first position of the procedure vector. Starting at the first secondary procedure (CPT2), the procedures are shifted during HCUP processing to eliminate blank secondary procedures. For example, if CPT2 and CPT4 contain nonmissing procedures and CPT3 is blank, then the value of CPT4 is shifted into CPT3. Secondary procedures are never shifted into the primary position (CPT1).

### Uniform Values

Variable	Description	Value	Value Description
CPTn	CPT-4/HCPSC procedures	5(a)	Procedure code
		Blank	Missing

### State Specific Notes

#### Maryland

The order of the CPT codes in CPTn does not pertain to the order of the detailed charges (CHGn) and revenue codes (REVCDn).

#### Nebraska

The order of the CPT codes in CPTn pertains to the order of the detailed charges (CHGn), revenue codes (REVCDn), and units (UNITn).

## DaysBetweenVisits - Number of days between visits

### General Notes

Days between visits (DaysBetweenVisits) is retained as reported by data with two exceptions. Any source-specific value for "unknown" is recoded to missing (.), and invalid characters such as negative values are set to invalid (.A). No edit checks are performed on this data element during HCUP processing to verify the time between events.

### Uniform Values

Variable	Description	Value	Value Description
DaysBetweenVisits	Number of days between visits	0 or higher	Days between visits
		.	Missing
		.A	Invalid

### State Specific Notes

*None*

## DHOUR - Discharge hour

### General Notes

Discharge hour (DHOUR) is coded in military time (e.g., 2:45 p.m. is represented as 1445). Invalid times are set to invalid (.). No other edit checks are performed on this data element during HCUP processing.

### Uniform Values

Variable	Description	Value	Value Description
DHOUR	Discharge hour	HHMM	Discharge hour
		.	Missing
		.A	Invalid

### State Specific Notes

#### Nebraska

Nebraska provided the hour of discharge, but not the minutes. During HCUP data processing, the minutes were imputed to be "00".



## DIED - Died during hospitalization

<b>General Notes</b>
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Died during hospitalization (DIED) is coded from disposition of patient. The HCUP data element for disposition of the patient varies across years of data.

Beginning in the 1998 data, the HCUP data element DISPUiform is used to code DIED.

- If DISPUiform indicates that a patient was discharged alive (values 1-7), then DIED is coded as 0.
- If DISPUiform indicates that a patient died in the hospital (value 20), then DIED is coded as 1.
- If DISPUiform is missing (.) or invalid (.A), then DIED is also missing (.) or invalid (.A).

When DISP\_X indicates that a patient died outside of the hospital (value = 40-42), then the disposition is coded as missing (DISPUiform = . and DIED = .).

From 1988-1997 data, the HCUP data element DISP is used to code DIED.

- If DISP indicates that a patient was discharged alive (values 1-7), then DIED is coded as 0.
- If DISP indicates that a patient died in or out of the hospital (value 20), then DIED is coded as 1.
- If DISP is missing (.), invalid (.A), or unavailable from the source (.B), then DIED is also missing (.), invalid (.A), or unavailable from the source (.B).

When noted, patients that died outside of the hospital are included in the same category as patients that died in the hospital (DISP = 20), so for these patients DIED is coded as 1.

In the 1998-2000 HCUP data files, missing values of DIED were erroneously set to invalid (.A).

Uniform Values			
Variable	Description	Value	Value Description
DIED	Died during hospitalization	0	Did not die
		1	Died
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)

State Specific Notes
<i>None</i>

## DISPUB92 - Disposition of patient, UB92 coding

### General Notes

DISPUB92 indicates the disposition of the patient at discharge and uses the same coding as the patient status data element on the UB-92 claim form.

DISPUB92 has more detailed categories for transfers and Home Health Care than the HCUP data element DISPUUniform. Some states do not provide enough detail in the coding of the discharge status to accurately code DISPUB92. For these states, the data element DISPUB92 is not available. DISPUUniform is available for all states. DISP\_X retains the disposition of patient as provided by the data source.

Uniform Values			
Variable	Description	Value	Value Description
DISPUB92	Disposition of patient, UB92 coding	1	Routine
		2	Short-term hospital
		3	Skilled Nursing Facility (SNF)
		4	Intermediate Care Facility (ICF)
		5	Another type of facility (for inpatient care)
		6	Home Health Care (HHC)
		7	Against medical advice (AMA)
		8	Home IV provider
		9	Admitted as an inpatient to this hospital, beginning in 2001 data. Valid only on outpatient data.
		20	Died in hospital
		40	Died at home
		41	Died in a medical facility
		42	Died, place unknown
		43	Alive - Federal health facility
		50	Hospice - home
		51	Hospice - medical facility
		61	Within this institution to a Medicare-approved swing bed, beginning in 2000 data

		62	Discharge, transferred to another rehabilitation facility including rehabilitation distinct part units of a hospital, beginning in 2001 data
		63	Discharge, transferred to a long term care hospital swing bed, beginning in 2001 data
		64	Discharge, transferred to a nursing facility certified by Medicaid, but not certified by Medicare
		65	Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital (beginning in 2004 data)
		71	Another institution for outpatient services, beginning in 2000 data
		72	This institution for outpatient services, beginning in 2000 data
		99	Discharge alive, destination unknown, beginning in 2001 data
		.	Missing
		.A	Invalid

<b>State Specific Notes</b>
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## Maine

Maine			
(Valid beginning in 1999)			
DISP_X		DISPUB92	
Value	Description	Value	Description
01	Home/Self-Care/Routine	1	Routine
02	Short Term Hospital	2	Short-term hospital
03	SNF	3	Skilled nursing facility
04	Intermediate Care Facility	4	Intermediate care facility
05	Other Facility	5	Another type of facility
06	Home Health Service	6	Home health care

07	Left Against Medical Advice	7	Against medical advice
08	Home IV Service	8	Home IV provider
09	Admitted as an inpatient to the hospital (Medicare claims). Valid only on outpatient data.	9	Admitted as an inpatient to this hospital (beginning in 2001 data). Valid only on outpatient data.
20	Expired	20	Died in the hospital
40	Expired at home (hospice care)	40	Died at home
41	Expired in medical facility (hospice care)	41	Died in other medical facility
42	Expired - place unknown (hospice care)	42	Died, place unknown
43	Federal Hospital (On IP layout)	43	Federal Hospital
50	Hospice - Home	50	Hospice - home
51	Hospice - Medical Facility	51	Hospice - medical facility
61	Discharged/Transferred/Referred within the same institution to a hospital-based Medicare approved swing bed	61	Within this institution to a hospital-based Medicare approved swing bed (beginning in 2000)
62	Another rehabilitation facility including rehabilitation distinct part units of a hospital	62	Another rehabilitation facility including rehabilitation distinct part units of a hospital, beginning in 2001 data.
63	Long term care hospital	63	Long term care hospital (beginning in 2001 data)
64	Medicaid only Nursing Home (on IP layout)	64	Nursing facility certified under Medicaid but not certified under Medicare, beginning in 2002 data.

71	Discharged/Transferred/Referred to another institution for outpatient services	71	Another institution for outpatient services (beginning in 2000)
72	Discharged/Transferred/Referred to same institution for outpatient services	72	This institution for outpatient services (beginning in 2000)
--		99	Discharged alive, destination unknown (beginning in 2001 data)
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

## Nebraska

Nebraska			
DISP_X		DISPUB92	
Value	Description	Value	Description
01	Routine or self care (routine discharge)	1	Routine
02	Another short-term general hospital for inpatient care	2	Short-term hospital
03	Skilled nursing facility (SNF) with Medicare certification	3	Skilled nursing facility
04	Intermediate care facility (ICF)	4	Intermediate care facility
05	Another type of institution for inpatient care	5	Another type of facility
06	Home under care of organized home health service organization	6	Home health care
07	Left against medical advice or discontinued care	7	Against medical advice
08	Home under care of a Home IV provider	8	Home IV provider
09	Admitted to this hospital (valid in outpatient databases only)	9	Admitted as an inpatient to this hospital. Valid only on outpatient data.

20	Expired	20	Died in the hospital
40	Expired at home	40	Died at home
41	Expired in a medical facility	41	Died in other medical facility
42	Expired, place unknown	42	Died, place unknown
43	Federal Hospital	43	Federal Hospital
50	Hospice - home	50	Hospice - home
51	Hospice - medical facility	50	Hospice - medical facility
61	Within this institution to hospital-based Medicare approved swing bed	61	Within this institution to hospital-based Medicare approved swing bed
62	Inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital	62	Inpatient rehabilitation facility including rehabilitation distinct part units of a hospital
63	Medicare certified long term	63	Long term care hospital
64	Nursing facility certified under Medicaid but not certified under Medicare (beginning in 2002 data)	64	Nursing facility certified under Medicaid but not certified under Medicare (beginning in 2002 data)
65	Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital	65	Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital (beginning in 2004 data)
71	Another institution for outpatient services as specified by the discharge plan of care	71	Another institution for outpatient services
72	To this institution for outpatient services as specified by the discharge plan of care	72	This institution for outpatient services
--	--	99	Discharged alive, destination unknown
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

## Utah

Utah			
DISP_X		DISPUB92	
Value	Description	Value	Description
01	Discharge to home or self care (routine)	1	Routine
02	Another short term hospital	2	Short-term hospital
03	Skilled nursing facility	3	Skilled nursing facility
04	Intermediate care facility	4	Intermediate care facility
05	Another type of institution	5	Another type of facility
06	Home under care of organized home health service organization	6	Home health care
07	Left against medical advice	7	Against medical advice
08	Discharged to home under care of a home IV provider	8	Home IV provider
--		9	Admitted as an inpatient to this hospital (beginning in 2001). Valid only on outpatient data.
20	Expired	20	Died in the hospital
40	Expired at home	40	Died at home
41	Expired in a medical facility	41	Died in other medical facility
42	Expired - place unknown	42	Died, place unknown
43	Federal Facility	43	Federal Health Facility
50	Hospice - home	50	Hospice - home
51	Hospice - medical facility	51	Hospice - medical facility
61	Within institution to hospital-based medicare swing bed	61	Within this institution to a hospital-based Medicare approved swing bed (added in 2000)
62	Another rehab facility including distinct part	62	Another rehabilitation facility including rehabilitation distinct part



	units in hospital		units of a hospital (beginning in 2001 data).
63	A long term care hospital	63	Discharge, transferred to a long term care hospital swing bed (beginning in 2001 data).
64	Nursing facility certified under Medicaid but not certified under Medicare	64	Nursing facility certified under Medicaid but not certified under Medicare (beginning in 2002).
65	Psychiatric facility	65	Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital (beginning in 2004 data)
71	Another institution for outpatient (as per plan of care)	71	Another institution for outpatient services (beginning in 2000)
72	To this institution for outpatient services (as per plan of care)	72	This institution for outpatient services (beginning in 2000)
--		99	Discharged alive, destination unknown (beginning in 2001 data).
09, 00, Blank	Unknown, Missing	.	Missing
Any other values		.A	Invalid
DISPUniform is coded directly from DISPUB92.			

## DISPUniform - Disposition of patient, uniform coding

### General Notes

DISPUniform indicates the disposition of the patient at discharge (routine, transfer to another hospital, died, etc.). To ensure uniformity of coding across data sources, DISPUniform combines detailed categories in the more general groups. For example,

- Transfers to facilities other than short-term hospitals (skilled nursing facilities, intermediate care facilities, and other type of facilities) are coded as DISPUniform = 5.
- Transfers to Home Health Care (including IV providers and Hospice home care) are coded as DISPUniform = 6.

DISPUB92 has more detailed categories for transfers and Home Health Care and distinguishes patients that died in the hospital from those that died outside of the hospital. The following table lists how the values of DISPUB92 map to the values of DISPUniform:

Coding of DISPUB92 into DISPUniform			
DISPUB92		DISPUniform	
Value	Description	Value	Description
1	Routine	1	Routine
71	Another institution for outpatient services. <i>Value was added beginning in the 2000 HCUP data.</i>		
72	This institution for outpatient services. <i>Value was added beginning in the 2000 HCUP data.</i>		
2	Short-term Hospital	2	Transfer to Short-term Hospital
9	Admitted as an inpatient to this hospital. Valid only on outpatient data. <i>Value was added beginning in the 2001 HCUP data.</i>		
43	Federal health facility		
3	Skilled Nursing Facility (SNF)	5	Transfer Other: Includes

4	Intermediate Care Facility (ICF)		Skilled Nursing Facility (SNF), Intermediate Care Facility (ICF), Another Type of Facility
5	Another Type of Facility		
51	Hospice - Medical Facility		
61	Within this institution to a hospital-based Medicare approved swing bed. <i>Value was added beginning in the 2000 HCUP data.</i>		
62	Discharge, transferred to another rehabilitation facility including rehabilitation distinct part units of a hospital. <i>Value was added beginning in 2001 HCUP data.</i>		
63	Discharge, transferred to a long term care hospital swing bed. <i>Value was added beginning in the 2001 HCUP data.</i>		
64	Discharge, transferred to a nursing facility certified by Medicaid, but not certified by Medicare. <i>Value was added beginning in the 2002 HCUP data.</i>		
65	Discharge, transferred to a psychiatric hospital or psychiatric distinct unit of a hospital. <i>Value was added beginning in the 2004 HCUP data.</i>		
6	Home Health Care (HHC)	6	Home Health Care (HHC)
8	Home IV Provider		
50	Hospice-Home		
7	Against Medical Advice (AMA)	7	Against Medical Advice (AMA)
20	Died in Hospital	20	Died
40	Died at Home. <i>Prior to the 2001 data, value 40 "Died at Home" was mapped to missing (.).</i>	99	Discharge alive, destination unknown. <i>Value was added beginning in the 2001 data.</i>
41	Died in Medical Facility. <i>Prior to 2001 data, value 41 "Died in Medical Facility" was mapped to missing (.).</i>		

42	Died, place unknown. <i>Prior to the 2001 data, value 42 "Died, place unknown" was mapped to missing (.).</i>		
99	Discharged alive, destination unknown. <i>Value was added beginning in the 2001 data.</i>		
.	Missing	.	Missing
.A	Invalid	.A	Invalid

DISP\_X retains the disposition of patient as provided by the data source.

Uniform Values			
Variable	Description	Value	Value Description
DISPUniform	Disposition of patient, uniform coding	1	Routine
		2	Transfer to short-term hospital
		5	Transfer other: includes Skilled Nursing Facility (SNF), Intermediate Care Facility (ICF), and another type of facility
		6	Home Health Care (HHC)
		7	Against medical advice (AMA)
		20	Died in hospital
		99	Discharged alive, destination unknown, beginning in 2001
		.	Missing
		.A	Invalid

State Specific Notes
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### Massachusetts

Massachusetts			
DISP_X		DISPUniform	
Value	Description	Value	Description
1	Routine (i.e. to home or usual place of residence)	1	Routine
8	Within hospital clinic referral		

--		2	Transfer to short-term hospital
3	Transferred to other facility	5	Transfer other: includes skilled nursing facility, intermediate care facility, and other types of facility
--		6	Home health care
4	AMA	7	Against medical advice
0	Died during ED visit	20	Died in hospital
--		43	Federal health facility, beginning in 2003 data.
--		99	Discharged alive, destination unknown
-, Blank	Missing	.	Missing (includes died outside of hospital)
9	Dead on Arrival (with or without resuscitative efforts in ED)		
Any values not documented by the data source		.A	Invalid
6	Eloped (Patients who are registered in the ED, but who then leave before they are seen and evaluated by a physician)		
There is not enough detail in the coding of DISP_X to code the HCUP variable DISPUB92.			

## DISP\_X - Disposition of patient, as received from source

### General Notes

DISP\_X retains the disposition of patient as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Two HCUP data elements contain uniformly coded information about the disposition of the patient:

- DISPUndiform has general categories for routine, hospital transfers, other transfers, Home Health Care, expired.
- DISPUB92 has more detailed categories for transfers and Home Health Care and distinguishes patients that died in the hospital from those that died outside of the hospital.

### Uniform Values

Variable	Description	Value	Value Description
DISP_X	Disposition of patient, as received from source	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element DISPUB92 or DISPUndiform.

## DMONTH - Discharge month

### General Notes

Discharge month (DMONTH) is derived from the discharge date (DDATE). If DDATE is missing, then DMONTH is missing (.). If DDATE is invalid, then DMONTH is invalid (.A).

### Uniform Values

Variable	Description	Value	Value Description
DMONTH	Discharge month	1-12	Discharge month
		.	Missing
		.A	Invalid

### State Specific Notes

*None*

## DSHOSPID - Data source hospital number

### General Notes

There are up to three different types of hospital identifiers included in the HCUP databases.

- The data source's own number scheme for identifying hospitals and facilities (DSHOSPID),
- The hospital identifier used by the American Hospital Association (AHAID and IDNUMBER), and
- A unique HCUP hospital identifier (HOSPID).

The hospital entity as defined by the data source may differ from the hospital entity as defined by the AHA. For example, the data source treats two separate facilities as two hospitals, while the AHA Annual Survey treats the two facilities as a single hospital, or vice versa. For consistency across states, HCUP defines hospitals in accordance with the American Hospital Association Annual Survey of Hospitals. During HCUP data processing, the data source's identification of the hospital is reconciled with the identification of the hospital in the AHA Annual Survey of Hospitals. For detailed information about this linking process, see the special report on HCUP Hospital Identifiers.

The data element DSHOSPID is available in the Core and Hospital file.

### Uniform Values

Variable	Description	Value	Value Description
DSHOSPID	Data source hospital number	13(a)	Data source hospital number

### State Specific Notes

#### Maryland

In 2000, some values of DSHOSPID have leading blanks. These DSHOSPIDs need to be left justified to be consistent with discharges from the same DSHOSPID in 2000 and other years.



## DQTR - Discharge quarter

### General Notes

Discharge quarter (DQTR) is derived from either the month of the discharge date or the supplied discharge quarter. If both of those fields are invalid or missing, DQTR is set to zero. For these cases, a temporary discharge quarter = 3 was used for the DRG grouper and ICD-9-CM verification routines because these algorithms require a valid discharge quarter.

For HCUP inpatient data only, a temporary discharge quarter = 3 was used for the DRG grouper and ICD-9-CM verification routines when the discharge quarter was missing or invalid because these algorithms require a valid discharge quarter.

### Uniform Values

Variable	Description	Value	Value Description
DQTR	Discharge quarter	1	First quarter (Jan - Mar)
		2	Second quarter (Apr - Jun)
		3	Third quarter (Jul - Sep)
		4	Fourth quarter (Oct - Dec)
		0	Missing or invalid

### State Specific Notes

*None*

## DXn - Diagnosis

### General Notes

In the HCUP inpatient databases, the first listed diagnosis (DX1) is the principal diagnosis. In the HCUP outpatient databases, the first listed diagnosis (DX1) may not be the principal diagnosis; it may just be the first listed diagnosis on the record.

The original value of the first listed diagnosis (DX1), whether blank or coded, is retained in the first position of the diagnosis vector. Starting at the first secondary diagnosis (DX2), the diagnoses are shifted during HCUP processing to eliminate blank secondary diagnoses. For example, if DX2 and DX4 contain nonmissing diagnoses and DX3 is blank, then the value of DX4 is shifted into DX3. Secondary diagnoses are never shifted into the first listed position (DX1).

Prior to 2003, E-codes are included in the diagnosis array (DXn). Beginning in 2003, any separately reported E-codes and any E-codes encountered in the diagnosis array are placed in a separate array specific to E codes (ECODEn).

Diagnoses are compared to a list of ICD-9-CM codes valid for the discharge date. Anticipation of or lags in response to official ICD-9-CM coding changes are permitted for discharges occurring within a window of time around the official ICD-9-CM coding changes (usually October 1). In the data prior to 1998, a six months window (three months before and three months after) is allowed. Beginning in the 1998 data, a year window (six months before and six months after) is allowed. For example, the code for Single Liveborn changed from "V300 " to "V3000" as of October 1, 1989. Under HCUP validation procedures, "V300 " is classified as valid for discharges on December 31, 1989, and "V3000" is classified as valid for discharges on July 1, 1989. If the diagnosis is not left justified, contains intermittent blanks, or is zero filled, then the diagnosis will be invalid.

Diagnoses are compared to the sex of the patient (EDX03 beginning in the 1998 data and ED1nn prior to 1998) and the patient's age (EAGE04 and EAGE05 beginning in the 1998 data and ED3nn and ED4nn prior to 1998) for checking the internal consistency of the record.

How invalid and inconsistent codes are handled varies by data year.

- Beginning in the 1998 data, invalid and inconsistent diagnoses are masked directly. Validity flags are not included on the HCUP record. Clinical Classifications Software (CCS) data elements are coded with respect to the diagnosis.

	Invalid Diagnosis	Inconsistent Code
The value of DXn	"invl"	"incn"
DXCCSn	Set to invalid (.A).	Set to inconsistent (.C)

- Prior to 1998 data, invalid and inconsistent diagnoses are retained on the record. Validity flags (DXVn) indicate invalid, inconsistent diagnosis codes. Clinical Classifications Software (CCS) data elements use the former name (DCCHPRn). The CCS was formerly known as the Clinical Classifications for Health Policy Research (CCHPR). The diagnosis related data elements are coded as follows:

	Invalid Diagnosis	Inconsistent Code
The value of DXn	Unchanged	Unchanged
DXVn	Set to 1	Set to inconsistent (.C)
DCCHPRn	Set to invalid (.A).	Retained (values 1-260)

The validity flags (DXVn) need to be used in connection with any analysis of the diagnoses (DXn).

The maximum number of diagnoses reported varies by state. HCUP retains all diagnosis fields provided by the data source.

Uniform Values			
Variable	Description	Value	Value Description
DXn	Diagnosis	annnn	Diagnosis code
		Blank	Missing
		invl	Invalid: beginning with 1998 data, EDX02
		incn	Inconsistent: beginning with 1998 data, EAGE04, EAGE05, EDX03

State Specific Notes
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## Massachusetts

Beginning in 1993, Massachusetts reported one "cause of injury" E-code. Prior to 2003, during HCUP processing, the separately reported E-code was placed after the last non-missing secondary diagnosis. E-codes can appear in other secondary diagnosis codes. Beginning in 2003, the separately reported E-code, and any E-codes encountered in the diagnosis variables, are placed in a separate array specific to E codes (ECODEn).

## **Maryland**

Maryland reports one "cause of injury" E-code as a separate variable. Prior to 2003, during HCUP processing, this separately reported E-code was placed after the last non-missing secondary diagnosis. Beginning in 2003, the separately reported E-code, and any E-codes encountered in the diagnosis variables are placed in a separate array specific to E codes (ECODEn).

Maryland supplied diagnosis codes in a field of length 7. Only the first five characters contained in the left-justified source field were used to assign the HCUP diagnosis codes.

## **Nebraska**

The Nebraska Hospital Association prohibits the release of discharge records for patients with HIV diagnoses. These discharges were not included in the source file provided to HCUP and are therefore not included in the HCUP files.

Nebraska reports one "cause of injury" E-code in a separate variable. Prior to 2003, during HCUP processing, this E-code was placed after the last non-missing diagnosis code. Beginning in 2003, the separately reported E-code, and any E-code encountered in the diagnosis variables are placed in a separate array specific to E codes (ECODEn).

## **Utah**

Utah reports one "cause of injury" E-code as a separate variable. Prior to 2003, during HCUP processing, this E-code was placed after the last non-missing diagnosis code. Beginning in 2003, the separately reported E-code, and any E-codes encountered in the diagnosis variables, are placed in a separate array specific to E codes (ECODEn).

## DX\_Visit\_Reason - Reason for visit diagnosis

### General Notes

In outpatient data, the patient reason for visit (DX\_VISIT\_REASON) is should be coded for all unscheduled visits. DX\_VISIT\_REASON is an ICD-9-CM diagnosis code.

Diagnoses are compared to a list of ICD-9-CM codes valid for the discharge date. Anticipation of or lags in response to official ICD-9-CM coding changes are permitted for discharges occurring within a window of time around the official ICD-9-CM coding changes (usually October 1). Beginning in the 1998 data, a year window (six months before and six months after) is allowed. Invalid diagnoses are set to "invl"

### Uniform Values

Variable	Description	Value	Value Description
DX_Visit_Reason	Reason for visit diagnosis	annnn	Diagnosis code
		Blank	Missing
		invl	Invalid: EDX02
		incn	Inconsistent: EAGE04, EAGE05, EDX03

### State Specific Notes

*None*

# **DXCCSn - Clinical Classifications Software (CCS): diagnosis classification**

## **General Notes**

Clinical Classifications Software (CCS) consists of over 260 diagnosis categories. This system is based on ICD-9-CM codes. All diagnosis codes are classified.

DXCCSn is coded as follows:

- 1 to 259 if the diagnosis code (DXn) is valid by the HCUP criteria and not an E-code (External Causes of Injury and Poisoning). The HCUP criteria for diagnosis validation allows a year window (six months before and six months after) around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes.
- 2601-2621 if the diagnosis code (DXn) is a valid E-code by the HCUP criteria.
- DXCCSn is missing (.), if there is no diagnosis code (DXn = " ").
- DXCCSn is set to invalid (.A), if the diagnosis code (DXn) is invalid by the HCUP criteria (EDX02).
- DXCCSn is set to inconsistent (.C), if the diagnosis code (DXn) is inconsistent with age (EAGE04 and EAGE05) or sex of the patient (EDX03).

In HCUP databases before 1998, this data element is called DCCHPRn.

## **Labels**

Labels for CCS categories are provided as an ASCII file in HCUP Tools: Labels and Formats.

## **Formats**

Formats to label CCS categories are documented in HCUP Tools: Labels and Formats. A format is also available to map CCS codes into a few broad classes of conditions based on ICD-9-CM chapters.

Uniform Values			
Variable	Description	Value	Value Description
DXCCSn	Clinical Classifications Software (CCS): diagnosis classification	1-259	CCS Diagnosis Codes
		260	CCS E-code Class (1988-1997 data)
		2601-2621	CCS E-code Class (beginning with 1998 data)
		.	No diagnosis code
		.A	Invalid diagnosis code: beginning with 1998 data, EDX02
		.C	Inconsistent: beginning with 1998 data, EAGE04, EAGE05, EDX03

State Specific Notes
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*None*

## E\_CCSh - Clinical Classifications Software (CCS): E code classification

### General Notes

Clinical Classifications Software (CCS) consists of over 260 diagnosis categories. This system is based on ICD-9-CM codes. All diagnosis codes including external cause of injury codes "E codes" are classified.

Prior to 2003, external cause of injury codes "E codes" are included in the diagnosis array (DXn) with CCS values in the corresponding array DXCCSn. Beginning in 2003, any separately reported E codes and any E codes encountered in the diagnosis array are placed in a separate array specific to E codes (ECODEn). The corresponding array E\_CCSh contains the CCS category.

In the CCS, E codes are classified into 20 categories (values 2601-2621). E\_CCSh is missing (.), if there is no E code (ECODEn = " "). E\_CCSh is set to invalid (.A), if the E code (ECODEn) is invalid by the HCUP criteria.

### Labels

Labels for CCS categories are provided as an ASCII file in HCUP Tools: Labels and Formats.

### Formats

Formats to label CCS categories are documented in HCUP Tools: Labels and Formats. A format is also available to map CCS codes into a few broad classes of conditions based on ICD-9-CM chapters.

Uniform Values			
Variable	Description	Value	Value Description
E_CCSh	Clinical Classifications Software (CCS): E code classification	2601-2621	CCS E-code Class (beginning with 1998 data)
		.	No diagnosis code
		.A	Invalid diagnosis code: beginning with 1998 data, EDX02
		.C	Inconsistent: beginning with 1998 data EDX03



<b>State Specific Notes</b>
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*None*

## ECODEn - E code n

### General Notes

Prior to 2003, external causes of injury codes "E codes" are included in the diagnosis array (DXn). Beginning in 2003, any separately reported E codes and any E codes encountered in the diagnosis array are placed in a separate array specific to E codes (ECODEn).

E codes reported on a discharge record are compared to a list of valid E codes for the discharge date. Anticipation of or lags in response to official ICD-9-CM coding changes are permitted for discharges occurring within a window of time around the official ICD-9-CM coding changes (usually October 1). A year window (six months before and six months after) is allowed. Invalid E codes are masked directly and Clinical Classifications Software (CCS) data elements (E\_CCSn) are set to invalid (.A).

The maximum number of E codes reported varies by state. HCUP retains all E codes provided by the data source in the State Inpatient Databases, but only the first four E codes are retained on the NIS.

### Uniform Values

Variable	Description	Value	Value Description
ECODEn	E code n	E code	annnn
		Blank	Missing
		Invl	Invalid E code

### State Specific Notes

*None*

## FEMALE - Indicator of sex

### General Notes

The sex of the patient (FEMALE) is provided by the data source. All non-male, non-female (e.g., "other") values are set to missing (.).

If FEMALE is inconsistent with diagnoses (EDX03) or procedures (EPR03), FEMALE is set to inconsistent (.C).

In HCUP databases before 1998, this data element is called SEX.

### Uniform Values

Variable	Description	Value	Value Description
FEMALE	Indicator of sex	0	Male
		1	Female
		.	Missing
		.A	Invalid
		.C	Inconsistent, EDX03, EPR03

### State Specific Notes

#### Utah

The source value "E" for "Encrypted patient gender (confidential data)" is recoded to missing (FEMALE = .).

Utah encrypts the patient gender for the following two conditions:

1. Patients with the Major Diagnosis Code of "Human Immunodeficiency Virus Infection" (value 25) and
2. Diagnosis Related Groups "Alcohol/Drug Abuse or Dependence" (values 433-437).

## HCUP\_AS - HCUP indicator of ambulatory surgery record

### General Notes

HCUP\_AS indicates records that have evidence of ambulatory surgery (AS) services reported on the HCUP record. A value of 1 or more indicates that there is evidence of AS services. A value of 0 marks records that do not include evidence of AS services. It is possible that a records with HCUP\_AS=0 did in fact have AS services, but that information was not captured on the HCUP record.

Evidence of AS services includes:

- Ambulatory surgery ICD-9-CM procedure code on record. The ICD-9-CM AS procedure range includes codes 00.50-86.99 (excluded are procedure codes in the range 88.4-88.59 that were part of the 2003 screen for identifying records to be included in the SASD).
- Center for Medicare and Medicaid Services (CMS) approved ambulatory surgery center CPT-4/HCPCS procedure code on record. Yearly updates are downloaded from CMS at <http://www.cms.hhs.gov/suppliers/asc/>. In general, the list includes CPT-4/HCPCS codes: 10121-69930, G0105, G0121, and G0260.
- Presence of at least one revenue center code in the following range: 036x (operating room services), 037x (anesthesia), 049x (ambulatory surgical care).
- Presence of a UB92 bill type of 83x indicating outpatient services.

### Uniform Values

Variable	Description	Value	Value Description
HCUP_AS	HCUP indicator of ambulatory surgery record	0	Record does not meet any HCUP Ambulatory Surgery criteria
		1	Ambulatory Surgery ICD-9-CM procedure code on record
		2	Ambulatory Surgery CPT procedure code on record
		3	Ambulatory Surgery revenue code on record
		4	UB-92 bill type of 83X;

<b>State Specific Notes</b>
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*None*

## HCUP\_ED - HCUP indicator of emergency department record

### General Notes

HCUP\_ED indicates records that have evidence of emergency department (ED) services reported on the HCUP record. A value of 1 or more indicates that there is evidence of ED services. A value of 0 marks records that do not include evidence of ED services. It is possible that a records with HCUP\_ED=0 did in fact have ED services, but that information was not captured on the HCUP record.

Evidence of ED services includes:

- Emergency department revenue code of 450-459 on record.
- Positive emergency department charge, when revenue center codes are not available.
- Emergency department CPT code of 99281-99285 reported on record.

### Uniform Values

Variable	Description	Value	Value Description
HCUP_ED	HCUP indicator of emergency department record	0	Record does not meet any HCUP Emergency Department criteria
		1	Emergency Department revenue code on record
		2	Positive Emergency Department charge (when revenue center codes are not available)
		3	Emergency Department CPT procedure code on record

### State Specific Notes

*None*

## HCUP\_OS - HCUP indicator of observation stay record

### General Notes

HCUP\_OS indicates records that have evidence of observation stay (OS) services reported on the HCUP record. A value of 1 or more indicates that there is evidence of OS services. A value of 0 marks records that do not include evidence of OS services. It is possible that a records with HCUP\_OS=0 did in fact have OS services, but that information was not captured on the HCUP record.

Evidence of OS services includes:

- Observation Stay revenue code of 760-762 on record.
- Positive observation stay charge, when revenue center codes are not available.
- Observation stay CPT code of 99217 or 99218-99220 reported on record.

### Uniform Values

Variable	Description	Value	Value Description
HCUP_OS	HCUP indicator of observation stay record	0	Record does not meet any HCUP Observation Stay criteria
		1	Observation Stay revenue code on record
		2	Positive Observation Stay charge (when revenue center codes are not available)
		3	Observation Stay CPT procedure code on record

### State Specific Notes

*None*

## HISPANIC\_X - Hispanic ethnicity, as received from the source

### General Notes

HISPANIC\_X retains information on the Hispanic ethnicity as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Two HCUP data elements contain other information about the race of the patient:

- RACE\_X retains information on the race of the patient as provided by the data source.
- RACE contains uniformly coded information about the race and ethnicity of the patient. The data element RACE should be used when analyzing race across data sources.

### Uniform Values

Variable	Description	Value	Value Description
HISPANIC_X	Hispanic ethnicity, as received from the source	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

*None*



## Homeless - Indicator that patient is homeless

### General Notes

Homeless (Homeless) is retained as reported by data with two exceptions. Any source-specific value for "unknown" is recoded to missing (.), and invalid characters such as negative values are set to invalid (.A).

### Uniform Values

Variable	Description	Value	Value Description
Homeless	Indicator that patient is homeless	0	Not identified as homeless
		1	Homeless
		.	Missing
		.A	Invalid

### State Specific Notes

*None*

## HOSPID - HCUP hospital identification number

### General Notes

There are up to three different types of hospital identifiers included in the HCUP databases.

- The data source's own number scheme for identifying hospitals and facilities (DSHOSPID),
- The hospital identifier used by the American Hospital Association (AHAID and IDNUMBER), and
- A unique HCUP hospital identifier (HOSPID).

The hospital entity as defined by the data source may differ from the hospital entity as defined by the AHA. For example, the data source treats two separate facilities as two hospitals, while the AHA Annual Survey treats the two facilities as a single hospital, or vice versa. For consistency across states, HCUP defines hospitals in accordance with the American Hospital Association Annual Survey of Hospitals. During HCUP data processing, the data source's identification of the hospital is reconciled with the identification of the hospital in the AHA Annual Survey of Hospitals. For detailed information about this linking process, see the special report on HCUP Hospital Identifiers.

The HCUP hospital identifier (HOSPID) is based on the AHA hospital identifier and is defined as:

- SSnnn, where SS = State FIPS Code, and
- nnn = hospital number unique to state.

HOSPID is missing for some hospitals because an AHA hospital identifier cannot be determined. Hospitals may not be registered with the AHA or the source-provided information cannot be matched to the AHA.

The data element HOSPID is available in the Hospital file.

Uniform Values			
Variable	Description	Value	Value Description
HOSPID	HCUP hospital identification number	5(n)	HCUP hospital identification number
		Blank	Missing

<b>State Specific Notes</b>
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*None*

## HOSPST - Hospital State postal code

<b>General Notes</b>
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HOSPST indicates the hospital's two-character state postal code (e.g., "CA" for California).

<b>Uniform Values</b>
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Variable	Description	Value	Value Description
HOSPST	Hospital State postal code	aa	Hospital State postal code

<b>State Specific Notes</b>
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*None*

## HOSPSTCO - Hospital modified FIPS state/county code

### General Notes

HOSPSTCO indicates the five-digit state and county modified FIPS code listed for that hospital in the American Hospital Association Annual Survey of Hospitals. Each hospital has only one unique state/county code. If multiple hospital units are in different counties, HOSPSTCO is the county code of the primary facility (as indicated by American Hospital Association Annual Survey information).

HOSPSTCO can be used to link HCUP data to any other data set that uses the modified FIPS county code, such as the Area Resource File and the American Hospital Association Annual Survey of Hospitals. In these modified FIPS county codes, Baltimore City is included in Baltimore County, St. Louis City in St. Louis County, and the independent cities of Virginia in the contiguous counties, Kalawao county, Hawaii is included in Maui County. The four Alaska Judicial Divisions are used as counties.

HOSPSTCO is missing for some hospitals because an AHA hospital identifier cannot be determined. Hospitals may not be registered with the AHA or the source-provided information cannot be matched to the AHA.

The data element HOSPSTCO is available in the Hospital file.

### Uniform Values

Variable	Description	Value	Value Description
HOSPSTCO	Hospital modified FIPS state/county code	5(n)	Hospital modified FIPS State/County code
		Blank	Missing

### State Specific Notes

*None*

## KEY - Unique record identifier

### General Notes

KEY contains a unique record identifier. Beginning in the 1998 data, all HCUP databases are sorted by KEY.

KEY can be used to link within a HCUP database, such as linking records in the Core and Charges files in the SID.

KEY can be used to link across HCUP databases within a data type, i.e., link records in the SID to records in the NIS.

KEY is a unique record identifier and not a person identifier. KEY cannot be used to link records between HCUP inpatient and ambulatory surgery files.

KEY replaces the database-specific record identifiers used in the 1988-1997 HCUP databases (SEQ, SEQ\_SID, and SEQ\_ASD).

### Uniform Values

Variable	Description	Value	Value Description
KEY	Unique record identifier	14(n)	Unique record identifier

### State Specific Notes

*None*

## LOS - Length of stay, cleaned

<b>General Notes</b>
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Length of stay (LOS) is calculated by subtracting the admission date (ADATE) from the discharge date (DDATE). Same-day stays are therefore coded as 0. Leave days are not subtracted. Before edit checks are performed, LOS and LOS\_X have the same value. If LOS is set to inconsistent (.C), the value of LOS\_X is retained.

LOS is not equal to the calculated value in the following cases:

- LOS is set to the supplied length of stay if the length of stay cannot be calculated (ADATE and/or DDATE is missing or invalid). Note: If the supplied length of stay codes same-day stays as 1 or subtracts leave days, then the supplied length of stay is NOT used.
- LOS is missing (.) if the length of stay cannot be calculated and the supplied length of stay is missing.
- LOS is invalid (.A) if
  - it is greater than the maximum value allowed during HCUP processing (the maximum allowed in the 1988-1997 data is 32,767; the maximum allowed beginning in the 1998 data is 20 years)
  - - or -
  - the length of stay cannot be calculated and the supplied length of stay is nonnumeric.
- An invalid calculated LOS is not replaced by the supplied length of stay.
- If the data source does not supply either admission date (ADATE) and discharge date (DDATE), or length of stay, then beginning in the 1998 data LOS is not present on the HCUP files. In the 1988-1997 data, LOS is retained on the HCUP files and is set to unavailable from source (.B).
- LOS is inconsistent (.C) if
  - LOS is negative (ELOS03 beginning in the 1998 data and ED011 in the 1988-1997 data),
  - Excessively long (ELOS04 beginning in the 1998 data and ED601 in the 1988-1997 data), or
  - Charges per day are unjustifiably low (ED911) or high (ED921).

Edit checks ED911 and ED921 are only performed on the 1988-1997 data. No charge per day edit checks are performed on the HCUP data beginning in the 1998 data.

Uniform Values			
Variable	Description	Value	Value Description
LOS	Length of stay, cleaned	0 - 365 (for HCUP inpatient data), 0-3 (for HCUP outpatient data)	Days (In the 1988-1997 inpatient data, LOS can be greater than 365 days)
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: beginning with 1998 data, ELOS03, ELOS04; in 1988-1997 data, ED011, ED601, ED911n, ED921

<b>State Specific Notes</b>
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### Massachusetts

Only the calculated length of stay was used because Massachusetts provided the total number of hours for the stay.

### Maine

Only the calculated length of stay could be used to assign LOS because Maine did not supply reported length of stay.

### Maryland

Prior to July 2001, Maryland did not supply length of stay and reported only the date of service. LOS and LOS\_X were therefore set to zero. Beginning in July 2001, Maryland provided the "From Date" and "To Date" resulting in calculation of the length of stay.

### Nebraska

The reported length of stay was not used when LOS could not be calculated because Nebraska coded same-day stays with the value 1.



## Utah

The calculated length of stay was used to assign LOS because Utah did not report the length of stay. If either the discharge date or admission date was missing on the source record, then LOS is missing (.).

## LOS\_X - Length of stay, uncleaned

### General Notes

Length of stay (LOS\_X) is calculated by subtracting the admission date (ADATE) from the discharge date (DDATE). Same-day stays are therefore coded as 0. Leave days are not subtracted. Before edit checks are performed, LOS and LOS\_X have the same value. If LOS is set to inconsistent (.C), the value of LOS\_X is retained. LOS\_X may contain negative or excessively large values.

LOS\_X is not equal to the calculated value in the following cases:

- LOS\_X is set to the supplied length of stay if the length of stay cannot be calculated (ADATE and/or DDATE is missing or invalid). Note: If the supplied length of stay codes same-day stays as 1 or subtracts leave days, then the supplied length of stay is NOT used.
- LOS\_X is missing (.) if the length of stay cannot be calculated and the supplied length of stay is missing.
- LOS\_X is invalid (.A) if
  - it is greater than the maximum value allowed during HCUP processing (the maximum allowed in the 1988-1997 data is 32,767; the maximum allowed beginning in the 1998 data is 20 years)
  - - or -
  - the length of stay cannot be calculated and the supplied length of stay is nonnumeric.
- An invalid calculated LOS\_X is not replaced by the supplied length of stay.
- If the data source does not supply either admission date (ADATE) and discharge date (DDATE), or length of stay, then beginning in the 1998 data LOS\_X is not present on the HCUP files. In the 1988-1997 data, LOS\_X is retained on the HCUP files and is set to unavailable from source (.B).

### Uniform Values

Variable	Description	Value	Value Description
LOS_X	Length of stay, uncleaned	+/- 7,305	Days (In the 1988-1997 inpatient data, LOS_X can be greater than 7,305 days)
		.	Missing
		.A	Invalid (nonnumeric or out of range)
		.B	Unavailable from source (coded in 1988-1997 data only)

<b>State Specific Notes</b>
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**Massachusetts**

Only the calculated length of stay was used because Massachusetts provided the total number of hours for the stay.

**Maine**

Only the calculated length of stay could be used to assign LOS\_X because Maine did not supply reported length of stay.

**Maryland**

Prior to July 2001, Maryland did not supply length of stay and reported only the date of service. LOS and LOS\_X were therefore set to zero. Beginning in July 2001, Maryland provided the "From Date" and "To Date" resulting in calculation of the length of stay.

**Nebraska**

The reported length of stay was not used when LOS\_X could not be calculated because Nebraska coded same-day stays with the value 1.

**Utah**

The calculated length of stay was used to assign LOS\_X because Utah did not report the length of stay. If either the discharge date or admission date was missing on the source record, then LOS\_X is missing (.).

## MARITALSTATUS - Marital status of patient

### General Notes

Marital status at the time of admission or outpatient service (MaritalStatus) is retained as provided by the data source. Undocumented source data are set to invalid (A). No edit checks are performed on this data element during HCUP processing.

### Uniform Values

Variable	Description	Value	Value Description
MARITALSTATUS	Marital status of patient	M	Married
		S	Single
		D	Divorced
		X	Legally Separated
		P	Life Partner
		W	Widowed
		Blank	Unknown, Missing
		A	Invalid

### State Specific Notes

*None*

## MDID\_S - Synthetic attending physician number

### General Notes

For HCUP data from 2001 to 2002, this data element is called MDNUM1\_S. Beginning in 2003, this data element is called MDNUM1\_R.

MDID\_S contains a fixed-key (one-to-one) encryption of the supplied attending physician number (MDID), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,; '\*@" are retained in the encrypted value, but not in the same location.
- Leading zeros are encrypted so that the two original physician identifiers "000A6" and "A6" are distinctly different.
- When the original attending physician and primary surgeon identifiers are the same, the synthetic identifiers, MDID\_S and SURGID\_S, are the same.
- When the MDID in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, MDID\_S is the same.

Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier MDID\_S refers to individual physicians or to groups. If the attending physician numbers supplied by the data source are not restricted to license numbers, the state-specific note includes available information about reporting practices, including whether MDID\_S refers to individual physicians or to groups.

Beginning in the 1993 data, supplied physician identifiers were checked for null characters. If null characters were found, they were replaced by blanks before the identifier was encrypted. Since this conversion was not done in prior years of HCUP data, the encrypted physician identifiers from 1993 on may not match those in earlier years. However, null characters are rarely included.

Uniform Values			
Variable	Description	Value	Value Description
MDID_S	Synthetic attending physician number	16(a)	Synthetic physician identifier
		Blank	Missing

<b>State Specific Notes</b>
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**Utah**

It is possible that two different values of MDID\_S identify the same attending physician. Utah reports a mixture of state license numbers and hospital-specific internal physician identifiers.

## MDNUM1\_R - Physician 1 number (re-identified)

### General Notes

HCUP encrypted physician identifiers are referred to by different names in the HCUP data across years.

Year	Variable
1988-2000	MDID_S
2001-2002	MDNUM1_S
Beginning with 2003	MDNUM1_R

MDNUM1\_R is specific to physicians. If the physician identifier is based on a state license number or Universal Physician Identification Number (UPIN), then MDNUM1\_R can be used to track a physician across hospitals. If the physician identifier is based on hospital-specific identifiers, then it can only be used to track physicians within a hospital. Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier refers to individual physicians or to groups. Refer to state-specific notes for more information about the type of physician identifiers provided by each state.

Because of a change in the algorithm for creating a masked physician number, physicians cannot be tracked from before 2003 to after 2003. In HCUP data prior to 2003, a synthetic physician number (MDNUM1\_S prior to 2003 and MDID\_S prior to 2001), created using fixed-key encryption, was available. Starting in data year 2003, a reidentification number (MDNUM1\_R) was used. MDNUM1\_R includes an arbitrarily chosen, identifying number that is unique to the physician identifier provided to HCUP.

### Uniform Values

Variable	Description	Value	Value Description
MDNUM1_R	Physician 1 number (re-identified)	9(n)	Physician identifier
		.	Missing

### State Specific Notes

## Utah

In the Utah SEDD, the attending physician is provided in MDNUM1\_R. Physician identification numbers do not accurately track physicians within and across hospitals. Utah reports a mixture of state license numbers and hospital-specific internal physician identifiers.



## MDNUM1\_S - Physician 1 number (synthetic)

### General Notes

HCUP encrypted physician identifiers are referred to by different names in the HCUP data across years.

Year	Variable
1988-2000	MDID_S
2001-2002	MDNUM1_S
Beginning with 2003	MDNUM1_R

MDNUM1\_S contains a fixed-key (one-to-one) encryption of the supplied physician 1 number (MDNUM1), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:; '\*@" are retained in the encrypted value, but not in the same location.
- Leading zeros are encrypted so that the two original physician identifiers "000A6" and "A6" are distinctly different.
- When the original physician 1 number and physician 2 number identifiers are the same, the synthetic identifiers, MDNUM1\_S and MDNUM2\_S, are the same.
- When the MDNUM1 in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, MDNUM1\_S is the same.

Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier MDNUM1\_S refers to individual physicians or to groups. If the physician 1 numbers supplied by the data source are not restricted to license numbers, the state-specific note includes available information about reporting practices, including whether MDNUM1\_S refers to individual physicians or to groups.

Beginning in the 1993 data, supplied physician 1 identifiers were checked for null characters. If null characters were found, they were replaced by blanks before the identifier was encrypted. Since this conversion was not done in prior years of HCUP data, the encrypted physician 1 identifiers from 1993 on may not match those in earlier years. However, null characters are rarely included.

Uniform Values			
Variable	Description	Value	Value Description
MDNUM1_S	Physician 1 number (synthetic)	16(a)	Synthetic physician identifier
		Blank	Missing

State Specific Notes
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### Utah

In the Utah SEDD, the attending physician is provided in MDNUM1\_S. Physician identification numbers do not accurately track physicians within and across hospitals. Utah reports a mixture of state license numbers and hospital-specific internal physician identifiers.

## MDSPEC - Attending physician specialty, as received from source

### General Notes

Beginning in 2001, this data element is called MDSPEC1.

The attending physician's specialty (MDSPEC) is retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

### Uniform Values

Variable	Description	Value	Value Description
MDSPEC	Attending physician specialty, as received from source	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

#### Maine

In Maine, MDSPEC is coded as follows:

MDSPEC	
<u>Value</u>	<u>Description</u>
01	Emergency Medicine
02	Preventative Medicine
03	Occupational Medicine
04	Public Health/Epidemiology
05	Oncology
06	General Practice
07	Alcohol Rehab

08	Infectious Diseases
09	Geriatrics
10	Allergy
11	Dermatology
12	Cardiology
13	Pulmonary/Respiratory
14	Physical Med/Rehab
15	DO Radiology
16	Not Used
17	DO Pathology
18	DO Anesthesiology
19	DO General Practice
20	Internal Medicine
21	Endocrinology
22	Gastroenterology
23	Nephrology
24	Urology
25	Hematology
26	Psychiatry
27	Proctology
28	Rheumatology
29	DO Dermatology
30	Not Used
31	Neurology
32	Ophthalmology
33	Otolaryngology
34	Nurse Anesthetist
35	Physicians Assistant
36	Optometrist
37	Genetics
38	Registered Nurse
39	Not Used
40	Radiology
41	Not Used
42	Not Used

43	Pathology
44	Not Used
45	Anesthesiology
46	Radiation Oncology
47	Not Used
48	Not Used
49	Not Used
50	Obstetrics & Gynecology
51	Pediatrics
52	Not Used
53	Pediatric Cardiology
54	Neonatology
55	Hospital Resident (D.O.)
56	Hospital Resident (M.D.)
57	DO Oncology/Hematology
58	Pediatric Neurology
59	Pediatric Oncology/Hematology
60	General Surgery
61	Orthopedic Surgery
62	Plastic Surgery
63	Thoracic Surgery
64	Neurological Surgery
65	Not Used
66	Not Used
67	Not Used
68	Not Used
69	Unknown
70	General Dentistry
71	Podiatry
72	Oral Surgery
73	Not Used
74	Not Used
75	Not Used
76	Not Used
77	Not Used

78	DO Gastroenterology
79	DO Cardiology
80	DO Family Practice
81	DO Emergency Medicine
82	DO Physical Med/Rehab
83	DO Internal Medicine
84	DO Urology
85	DO Proctology
86	DO Neurology
87	DO Ophthalmology
88	DO Otolaryngology
89	DO Psychiatry
90	DO Obstetrics & Gynecology
91	DO General Surgery
92	DO Orthopedic Surgery
93	DO Plastic Surgery
94	DO Thoracic Surgery
95	DO Pediatrics
96	Psychology
97	Nurse Mid-Wife
98	Surgical Assistant
99	Family Practice

## MDSPEC1 - Physician 1 specialty, as received from source

### General Notes

Prior to 2001, this data element is called MDSPEC.

The physician 1 specialty (MDSPEC1) is retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

### Uniform Values

Variable	Description	Value	Value Description
MDSPEC1	Physician 1 specialty, as received from source	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

#### Maine

In Maine, MDSPEC1 is coded as follows:

MDSPEC1	
<u>Value</u>	<u>Description</u>
01	Emergency Medicine
02	Preventative Medicine
03	Occupational Medicine
04	Public Health/Epidemiology
05	Oncology
06	General Practice
07	Alcohol Rehab
08	Infectious Diseases

09	Geriatrics
10	Allergy
11	Dermatology
12	Cardiology
13	Pulmonary/Respiratory
14	Physical Med/Rehab
15	DO Radiology
16	Not Used
17	DO Pathology
18	DO Anesthesiology
19	DO General Practice
20	Internal Medicine
21	Endocrinology
22	Gastroenterology
23	Nephrology
24	Urology
25	Hematology
26	Psychiatry
27	Proctology
28	Rheumatology
29	DO Dermatology
30	Not Used
31	Neurology
32	Ophthalmology
33	Otolaryngology
34	Nurse Anesthetist
35	Physicians Assistant
36	Optometrist
37	Genetics
38	Registered Nurse
39	Not Used
40	Radiology
41	Not Used
42	Not Used
43	Pathology



44	Not Used
45	Anesthesiology
46	Radiation Oncology
47	Not Used
48	Not Used
49	Not Used
50	Obstetrics & Gynecology
51	Pediatrics
52	Not Used
53	Pediatric Cardiology
54	Neonatology
55	Hospital Resident (D.O.)
56	Hospital Resident (M.D.)
57	DO Oncology/Hematology
58	Pediatric Neurology
59	Pediatric Oncology/Hematology
60	General Surgery
61	Orthopedic Surgery
62	Plastic Surgery
63	Thoracic Surgery
64	Neurological Surgery
65	Not Used
66	Not Used
67	Not Used
68	Not Used
69	Unknown
70	General Dentistry
71	Podiatry
72	Oral Surgery
73	Not Used
74	Not Used
75	Not Used
76	Not Used
77	Not Used
78	DO Gastroenterology

79	DO Cardiology
80	DO Family Practice
81	DO Emergency Medicine
82	DO Physical Med/Rehab
83	DO Internal Medicine
84	DO Urology
85	DO Proctology
86	DO Neurology
87	DO Ophthalmology
88	DO Otolaryngology
89	DO Psychiatry
90	DO Obstetrics & Gynecology
91	DO General Surgery
92	DO Orthopedic Surgery
93	DO Plastic Surgery
94	DO Thoracic Surgery
95	DO Pediatrics
96	Psychology
97	Nurse Mid-Wife
98	Surgical Assistant
99	Family Practice

## MDSPEC2 - Physician 2 specialty, as received from source

### General Notes

Prior to 2001, this data element is called SURGSPEC.

The physician 2 specialty (MDSPEC2) is retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

### Uniform Values

Variable	Description	Value	Value Description
MDSPEC2	Physician 2 specialty, as received from source	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

#### Maine

In Maine, MDSPEC2 is coded as follows:

MDSPEC2	
<u>Value</u>	<u>Description</u>
01	Emergency Medicine
02	Preventative Medicine
03	Occupational Medicine
04	Public Health/Epidemiology
05	Oncology
06	General Practice
07	Alcohol Rehab
08	Infectious Diseases

09	Geriatrics
10	Allergy
11	Dermatology
12	Cardiology
13	Pulmonary/Respiratory
14	Physical Med/Rehab
15	DO Radiology
16	Not Used
17	DO Pathology
18	DO Anesthesiology
19	DO General Practice
20	Internal Medicine
21	Endocrinology
22	Gastroenterology
23	Nephrology
24	Urology
25	Hematology
26	Psychiatry
27	Proctology
28	Rheumatology
29	DO Dermatology
30	Not Used
31	Neurology
32	Ophthalmology
33	Otolaryngology
34	Nurse Anesthetist
35	Physicians Assistant
36	Optometrist
37	Genetics
38	Registered Nurse
39	Not Used
40	Radiology
41	Not Used
42	Not Used
43	Pathology

44	Not Used
45	Anesthesiology
46	Radiation Oncology
47	Not Used
48	Not Used
49	Not Used
50	Obstetrics & Gynecology
51	Pediatrics
52	Not Used
53	Pediatric Cardiology
54	Neonatology
55	Hospital Resident (D.O.)
56	Hospital Resident (M.D.)
57	DO Oncology/Hematology
58	Pediatric Neurology
59	Pediatric Oncology/Hematology
60	General Surgery
61	Orthopaedic Surgery
62	Plastic Surgery
63	Thoracic Surgery
64	Neurological Surgery
65	Not Used
66	Not Used
67	Not Used
68	Not Used
69	Unknown
70	General Dentistry
71	Podiatry
72	Oral Surgery
73	Not Used
74	Not Used
75	Not Used
76	Not Used
77	Not Used
78	DO Gastroenterology

79	DO Cardiology
80	DO Family Practice
81	DO Emergency Medicine
82	DO Physical Med/Rehab
83	DO Internal Medicine
84	DO Urology
85	DO Proctology
86	DO Neurology
87	DO Ophthalmology
88	DO Otolaryngology
89	DO Psychiatry
90	DO Obstetrics & Gynecology
91	DO General Surgery
92	DO Orthopaedic Surgery
93	DO Plastic Surgery
94	DO Thoracic Surgery
95	DO Pediatrics
96	Psychology
97	Nurse Mid-Wife
98	Surgical Assistant
99	Family Practice

## MRN\_R - Medical record number (re-identified)

### General Notes

MRN\_R is specific to patients (persons) so that multiple admissions by the same patient to a single institution can be linked. MRN\_R does not allow linkage of persons across institutions.

Because of a change in the algorithm for creating person identifiers, patients cannot be tracked from before 2003 to after 2003. In HCUP data prior to 2003, a synthetic medical record number (MRN\_S), created using fixed-key encryption, was available. Starting in data year 2003, a reidentification number (MRN\_R) was used. MRN\_R includes an arbitrarily chosen, identifying number that is unique to the medical record identifier provided to HCUP.

MRN\_R should not be used for analyses without first consulting summary statistics on:

Frequencies of the number of discharges per nonmissing MRN\_R, by hospital, and

Hospital-level counts of the number of unique nonmissing MRN\_Rs, the number of discharges associated with these MRN\_Rs, the ratio of these two numbers (discharges/person), and the number of discharges without a MRN\_R.

### Uniform Values

Variable	Description	Value	Value Description
MRN_R	Medical record number (re-identified)	9(n)	Medical record number
		.	Missing

### State Specific Notes

#### Maryland

Maryland supplied an encrypted Medical Record Number. During HCUP processing, this encrypted identifier was assigned to MRN and re-encrypted for MRN\_R.

In the 2001 SASD, the coding of the source provided medical record number appears inconsistent with other years. Prior to 2001, the supplied values have eleven (11) characters. In 2001, the supplied values have four to nine (4-9) characters. The inpatient and emergency department data provided to HCUP by Maryland include an eleven character medical record number in all years.



## MRN\_S - Synthetic medical record number

### General Notes

Beginning in 2003, this data element is called MRN\_R.

MRN\_S is specific to patients (persons) so that multiple admissions by the same patient to a single institution can be linked. MRN\_S does not allow linkage of persons across institutions.

MRN\_S should not be used for analyses without first consulting summary statistics on:

- Frequencies of the number of discharges per nonmissing MRN\_S, by hospital, and
- Hospital-level counts of the number of unique nonmissing MRN\_Ss, the number of discharges associated with these MRN\_Ss, the ratio of these two numbers (discharges/person), and the number of discharges without a MRN\_S.

MRN\_S contains a fixed-key (one-to-one) encryption of the supplied medical record number (MRN), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:; '\*@" are retained in the encrypted value but not in the same location.
- Leading zeros are retained. If a hospital codes the same medical record number inconsistently (sometimes with leading zeros and sometimes with leading blanks), the HCUP medical record numbers are different.
- When the MRN in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, MRN\_S is the same.

Beginning in the 1993 data, the medical record numbers were checked for null characters. If null characters were found, they were replaced by blanks before the number was encrypted. Since this conversion was not done in prior years of HCUP data, the encrypted medical record numbers from 1993 on may not match those in earlier years. However, null characters are rarely included.

Uniform Values			
Variable	Description	Value	Value Description
MRN_S	Synthetic medical record number	17(a)	Synthetic medical record number
		Blank	Missing

<b>State Specific Notes</b>
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**Maine**

Caution should be used when using MRN\_S to track patients back to 1999. The values supplied by the data source in the 1999 data appear different from the values supplied beginning in 2000.

Maine provides encrypted medical record numbers. During HCUP processing, medical record numbers were re-encrypted (MRN\_S).

## NCPT - Number of CPT/HCPCS procedures for this discharge

### General Notes

NCPT indicates the total number of CPT or HCPCS procedures (valid and invalid) coded on the discharge record. In assigning NCPT, the first listed CPT procedure is included in the count, even if it is blank, so long as there is an additional CPT procedure present (see table below).

Value	Description
0	No CPT or HCPCS procedures are coded on the record.
1	Only the first listed procedure (CPT1) is coded. All secondary procedures are blank.
2	One secondary procedure (CPT2) is coded. The first listed procedure (CPT1) may be coded or blank.
3	The second and third procedures (CPT2 and CPT3) are coded. The first listed procedure (CPT1) may be coded or blank.
etc.	

### Uniform Values

Variable	Description	Value	Value Description
NCPT	Number of CPT/HCPCS procedures for this discharge	0 - 25	Number of procedures

### State Specific Notes

*None*

## NDX - Number of diagnoses on this discharge

### General Notes

NDX indicates the total number of diagnoses (valid and invalid) coded on the discharge record. In assigning NDX, the first listed diagnosis is included in the count, even if it is blank, so long as there is a secondary diagnosis present (see table below).

Value	Description
0	No diagnoses are coded on the record.
1	Only the first listed diagnosis (DX1) is coded. All secondary diagnoses are blank.
2	One secondary diagnosis (DX2) is coded. The first listed diagnosis (DX1) may be coded or blank.
3	The second and third diagnoses (DX2 and DX3) are coded. The first listed diagnosis (DX1) may be coded or blank.
etc.	

### Uniform Values

Variable	Description	Value	Value Description
NDX	Number of diagnoses on this discharge	0 - 30	Number of diagnoses

### State Specific Notes

*None*

## NEcode - Number of E codes on this record

### General Notes

Prior to 2003, E-codes are included in the diagnosis array (DXn). Beginning in 2003, any separately reported E-codes and any E-codes encountered in the diagnosis array are placed in a separate array specific to E codes (ECODEn). NECODE indicates the total number of external cause of injury codes "E codes" (valid and invalid) that are included in the E code array (ECODEn). Prior to 2003, E-codes are included in the diagnosis array (DXn). Beginning in 2003, any separately reported E-codes and any E-codes encountered in the diagnosis array are placed in a separate array specific to E codes (ECODEn). NECODE indicates the total number of external cause of injury codes "E codes" (valid and invalid) that are included in the E code array (ECODEn).

In the NIS, only the first four E codes are retained on the record. Since the number of E codes on the original record (NEcode) can be greater than the number of E codes available on the NIS record, caution needs to be taken when using NEcode to loop through the E codes. A counter for the loop should not extend past 4. Programming code such as the following example SAS statement is needed to take this into account:

```
DO I = 1 to MIN(4,NEcode);  
  Followed by code to process all E codes.  
END;
```

### Uniform Values

Variable	Description	Value	Value Description
NEcode	Number of E codes on this record	nn	Number of E codes

### State Specific Notes

*None*

## NEOMAT - Neonatal and/or maternal DX and/or PR

### General Notes

NEOMAT identifies discharges with neonatal and/or maternal diagnoses and procedures.

### Uniform Values

Variable	Description	Value	Value Description
NEOMAT	Neonatal and/or maternal DX and/or PR	0	No neonatal or maternal diagnosis or procedure on record
		1	Maternal diagnosis or procedure on record
		2	Neonatal diagnosis on record
		3	Neonatal diagnosis and maternal diagnoses or procedures on the same record

### State Specific Notes

*None*

## NPR - Number of procedures on this discharge

### General Notes

NPR indicates the total number of ICD-9-CM procedures (valid and invalid) coded on the discharge record. In assigning NPR, the first listed procedure is included in the count, even if it is blank, so long as there is an additional procedure present (see table below).

Value	Description
0	No procedures are coded on the record.
1	Only the first listed procedure (PR1) is coded. All secondary procedures are blank.
2	One secondary procedure (PR2) is coded. The first listed procedure (PR1) may be coded or blank.
3	The second and third procedures (PR2 and PR3) are coded. The first listed procedure (PR1) may be coded or blank.
etc.	

### Uniform Values

Variable	Description	Value	Value Description
NPR	Number of procedures on this discharge	0 - 30	Number of procedures

### State Specific Notes

*None*

## PAY1 - Expected primary payer, uniform

### General Notes

PAY1 indicates the expected primary payer (Medicare, Medicaid, private insurance, etc.). To ensure uniformity of coding across data sources, PAY1 combines detailed categories in the more general groups. For example,

- Medicare includes both fee-for-service and managed care Medicare patients.
- Medicaid includes both fee-for-service and managed care Medicaid patients.
- Private insurance (PAY1 = 3) includes Blue Cross, commercial carriers, and private HMOs and PPOs.
- Other (PAY1 = 6) includes Worker's Compensation, CHAMPUS, CHAMPVA, Title V, and other government programs.

In the 1988-1997 data, the data element PAY1\_N provides more detailed categories for private insurance and other payers. This data element is discontinued beginning in the 1998 data because of the difficulty of coding the information uniformly across States.

The HCUP data element PAY1\_X retains the expected primary payer as provided by the data source. The State Specific Notes for PAY1 include information on how the source values contained in the PAY1\_X are recoded into the HCUP uniform values of PAY1.

If information on secondary or tertiary payers is provided by the data source, the coding of the associated HCUP variables (PAY2, PAY2\_X, and PAY3\_X) is included under the State Specific Notes for PAY1.

Uniform Values			
Variable	Description	Value	Value Description
PAY1	Expected primary payer, uniform	1	Medicare
		2	Medicaid
		3	Private insurance
		4	Self-pay
		5	No charge
		6	Other
		.	Missing
		.A	Invalid



		.B	Unavailable from source (coded in 1988-1997 data only)
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<b>State Specific Notes</b>
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### Massachusetts

Massachusetts			
PAY1_X and PAY2_X		PAY1 and PAY2	
Value	Description	Value	Description
121	Medicare	1	Medicare
220	Medicare HMO - Blue Care 65		
125	Medicare HMO - Fallon Senior Plan		
221	Medicare HMO - Harvard Community Health Plan 65		
223	Medicare HMO - Harvard Pilgrim Health Care of New England Care Plus		
230	Medicare HMO - HCHP First Seniority		
127	Medicare HMO - Health New England Medicare Wrap		
222	Medicare HMO - Healthsource CMHC		
212	Medicare HMO - Healthsource CMHC Central Care Supplement		
128	Medicare HMO - HMO Blue for Seniors		
129	Medicare HMO - Kaiser Medicare Plus Plan		
234	Medicare HMO - Managed Blue for Seniors		
132	Medicare HMO - Matthew Thornton Senior Plan		
211	Medicare HMO - Neighborhood Health Plan Senior Health Plus		
134	Medicare HMO - Other (not listed elsewhere)		
131	Medicare HMO - Pilgrim Enhance 65		
210	Medicare HMO - Pilgrim Preferred 65		
231	Medicare HMO - Pilgrim Prime		
232	Medicare HMO - Seniorcare Direct		

233	Medicare HMO - Seniorcare Plus		
224	Medicare HMO - Tufts Secure Horizons		
225	Medicare HMO - US Healthcare		
133	Medicare HMO - Tufts Medicare Supplement (TMS)		
135	Out-of-State Medicare		
208	HealthNet (Boston Medical Center MCD Program)	2	Medicaid
103	Medicaid (includes MassHealth)		
107	Medicaid Managed Care - Community Health Plan		
108	Medicaid Managed Care - Fallon Community Health Plan		
109	Medicaid Managed Care - Harvard Community Health Plan		
110	Medicaid Managed Care - Health New England		
111	Medicaid Managed Care - HMO Blue		
112	Medicaid Managed Care - Kaiser Foundation Plan		
113	Medicaid Managed Care - Neighborhood Health Plan		
115	Medicaid Managed Care - Pilgrim Health Care		
114	Medicaid Managed Care - United Health Plans of NE (Ocean State Physician's Plan)		
119	Medicaid Managed Care Other (not listed elsewhere)		
106	Medicaid Managed Care - Central Mass. Health Care		
104	Medicaid Managed Care - Primary Care Clinician (PCC)		
116	Medicaid Managed Care - Tufts Associated Health Plan		
118	Medicaid Mental Health & Substance Abuse Plan - Mass Behavioral Health Partnerships		
207	Network Health (Cambridge Health Alliance MCD Program)		
120	Out-of-State Medicaid		

71	ADMAR	3	Private Insurance
137	AARP/Medigap supplement		
51	Aetna Life Insurance		
161	Aetna Managed Choice POS		
22	Aetna Open Choice PPO		
272	Auto Insurance		
138	Banker's Life and Casualty Insurance		
139	Banker's Multiple Line		
2	Bay State - a product of HMO Blue		
136	BCBS Medex		
11	Blue Care Elect		
46	Blue Chip (BCBS Rhode Island)		
160	Blue Choice (incl. Healthflex Blue) - POS		
142	Blue Cross Indemnity		
50	Blue Health Plan for Kids		
52	Boston Mutual Insurance		
154	BCBS Other (not listed elsewhere)		
155	Blue Cross Managed Care Other (not listed elsewhere)		
204	Christian Brothers Employee		
30	CIGNA (Indemnity)		
250	CIGNA HMO		
171	CIGNA POS		
87	CIGNA PPO		
140	Combined Insurance Company of America		
21	Commonwealth PPO		
44	Community Health Plan		
13	Community Health Plan Options (New York)		
42	ConnectiCare of Massachusetts		
54	Continental Assurance Insurance		
69	Corporate Health Insurance Liberty Plan		
4	Fallon Community Health Plan (includes Fallon Plus, Fallon Affiliates, Fallon Umass)		
167	Fallon POS		
67	First Allmerica Financial Life Insurance		

181	First Allmerica Financial Life Insurance EPO		
27	First Allmerica Financial Life Insurance PPO		
88	Freedom Care		
162	Great West Life POS		
28	Great West Life PPO		
89	Great West/NE Care		
55	Guardian Life Insurance		
23	Guardian Life Insurance Company PPO		
56	Hartford L & A Insurance		
200	Hartford Life Insurance Co.		
1	Harvard Community Health Plan		
20	HCHP of New England (formerly RIGHA)		
37	HCHP - Pilgrim HMO (integrated product)		
14	Health New England Advantage POS		
38	Health New England Select (self funded)		
24	Health New England, Inc.		
45	Health Source New Hampshire		
251	Healthsource CMHC HMO		
164	Healthsource CMHC Plus POS		
49	Healthsource CMHC Plus PPO		
72	Healthsource New Hampshire		
165	Healthsource New Hampshire POS (self funded)		
90	Healthsource Preferred (self funded)		
271	Hillcrest HMO		
81	HMO Blue		
57	John Hancock Life Insurance		
82	John Hancock Preferred		
169	Kaiser Added Choice		
40	Kaiser Foundation		
58	Liberty Life Insurance		
85	Liberty Mutual		
59	Lincoln National Insurance		
19	Matthew Thornton		
43	MEDTAC		

96	Metrahealth (United Care of NE)		
158	Metrahealth - HMO (United Care of NE)		
172	Metrahealth - POS (United Care of NE)		
157	Metrahealth - PPO (United Care of NE)		
201	Mutual of Omaha		
62	Mutual of Omaha Insurance		
33	Mutual of Omaha PPO		
47	Neighborhood Health Plan		
3	Network Blue (PPO)		
91	New England Benefits		
63	Mutual of Omaha Insurance		
64	New York Life Care Indemnity (New York Life Insurance)		
34	New York Life Care PPO		
202	New York Life Insurance		
199	Other EPO (not listed elsewhere)		
31	One Health Plan HMO (Great West Life)		
77	Options for Healthcare PPO		
147	Other commercial insurance (not listed elsewhere)		
148	Other HMO (not listed elsewhere)		
141	Other Medigap (not listed elsewhere)		
99	Other POS (not listed elsewhere)		
156	Out-of-State BCBS		
65	Paul Revere Life Insurance		
78	Phoenix Preferred PPO		
10	Pilgrim Advantage - PPO		
39	Pilgrim Direct		
8	Pilgrim Health Care		
95	Pilgrim Select - PPO		
183	Pioneer Health Care EPO		
79	Pioneer Health Care PPO		
25	Pioneer Plan		
149	PPO and Other Managed Care (not listed elsewhere)		
203	Principal Financial Group (Principal Mutual		

	Life)		
184	Private Healthcare Systems EPO		
166	Private Healthcare Systems POS		
84	Private Healthcare Systems PPO		
75	Prudential Healthcare HMO		
17	Prudential Healthcare POS		
18	Prudential Healthcare PPO		
66	Prudential Insurance		
93	Psychological Health Plan		
101	Quarto Claims		
94	Time Insurance Co.		
100	Transport Life Insurance		
7	Tufts Associated Health Plan		
80	Tufts Total Health Plan PPO		
97	Unicare		
182	Unicare Preferred Plus Managed Access PPO		
270	Unicare Preferred Plus PPO		
70	Union Labor Life Insurance		
86	United Health & Life PPO (subsidiary of United Health Plans of NE)		
73	United Health & Life (subsidiary of United Health Plans of NE)		
9	United Health Plan of New England (Ocean State)		
74	United Healthcare Insurance Company		
35	United Healthcare Insurance Company - HMO (new for 1997)		
163	United Healthcare Insurance Company - POS (new for 1997)		
36	United Healthcare Insurance Company - PPO (new for 1997)		
48	US Healthcare		
83	US Healthcare Quality Network Choice PPO		
170	US Healthcare Quality POS		
102	Wausau Insurance Company		
145	Self-Pay	4	Self-pay

143	Free Care	5	No charge
990	Free Care - co-pay, deductible, or co-insurance (when billing for free care services use #143)		
98	Healthy Start		
151	CHAMPUS	6	Other
152	Foundation		
153	Grant		
144	Other Government		
150	Other Non-Managed Care (not listed elsewhere)		
146	Worker's Compensation	.	Missing
Blank	Missing		
159	None (Valid only for secondary source of payment)		
Any values not documented by the data source		.A	Invalid

## Maine

Maine			
(Valid beginning in 1999)			
PAY1_X, PAY2_X, PAY3_X		PAY1, PAY 2	
Value	Description	Value	Description
01	Medicare	1	Medicare
02	Medicaid	2	Medicaid
05	Blue Cross	3	Private insurance
06	Other commercial carriers	3	Private insurance
10	HMO/PPO	3	Private insurance
08	Self-pay	4	Self-pay
07	Charity	5	No charge
03	U.S. Title V	6	Other
04	CHAMPUS/USVA		
09	Worker's Compensation		
11	Other or Unknown	.	Missing
Blank	Missing		
Any values not documented by the data source		.A	Invalid

## Maryland

Maryland			
(Valid beginning in 1998)			
PAY1_X and PAY2_X		PAY1 and PAY2	
Value	Description	Value	Description
01	Medicare	1	Medicare
15	Medicare HMO (payer specified in PAYER1_X/PAYER2_X)	1	Medicare
02	Medicaid	2	Medicaid
14	Medicaid HMO (payer specified in PAYER1_X/PAYER2_X)	2	Medicaid
04	Blue Cross of MD	3	Private Insurance
16	Blue Cross of the National Capital Area (HMO)	3	Private Insurance
17	Blue Cross (other state)	3	Private Insurance
05	Commercial/PPO	3	Private Insurance
12	Managed Care (payer specified in PAYER1_X/ PAYER2_X)	3	Private Insurance
08	Self-pay	4	Self-pay
09	Charity - no charge	5	No charge
03	Title V	6	Other
06	Other government program		
07	Worker's Compensation		
10	Other		
11	Donor		
77	Not Applicable (Secondary payer only)	.	Missing
99	Unknown		
Blank	Missing		
13	Do not use	.A	Invalid
Any values not documented by the data source			



Maryland			
(Valid from 1996-1997)			
PAY1_X and PAY2_X		PAY1 and PAY2	
Value	Description	Value	Description
1, 15	Medicare; Medicare HMO	1	Medicare
2,14	Medicaid; Medicaid HMO	2	Medicaid
4, 16, 17	Blue Cross; Blue Cross NCA; Blue Cross - other State	3	Private Insurance
5	Commercial Insurance		
12	HMO		
8	Self-pay	4	Self-pay
9	Charity	5	No charge
3	Title V	6	Other
7	Workers' Compensation		
6	Other government program		
10, 11	Other; Donor		
99, blank	<b>Primary Payer</b> Unknown; missing	.	Missing
99, 77, blank	<b>Secondary Payer</b> Unknown; not applicable; missing	.	Missing
Other Values		.A	Invalid

Maryland			
(Valid from 1993-1995)			
PAY1_X and PAY2_X		PAY1 and PAY2	
Value	Description	Value	Description
1	Medicare	1	Medicare
2, 13,14	Medicaid; Medicaid (state only); Medicaid HMO	2	Medicaid
4	Blue Cross	3	Private Insurance
5	Commercial Insurance		
12	HMO		
8	Self-pay	4	Self-pay
9	Charity	5	No charge
3	Title V	6	Other

7	Workers' Compensation		
6	Other government program		
10, 11	Other; Donor		
99, blank	<b>Primary Payer</b> Unknown; missing	.	Missing
99, 77, blank	<b>Secondary Payer</b> Unknown; not applicable; missing	.	Missing
Other Values		.A	Invalid

Maryland			
(Valid from 1990-1992)			
PAY1_X and PAY2_X		PAY1 and PAY2	
Value	Description	Value	Description
1	Medicare	1	Medicare
2, 13,14	Medicaid; Medicaid (state only); Medicaid HMO	2	Medicaid
4	Blue Cross	3	Private Insurance
5	Commercial Insurance		
12	HMO		
8	Self-pay	4	Self-pay
9	Charity	5	No charge
3	Title V	6	Other
7	Workers' Compensation		
6	Other government program		
10, 11	Other; Donor		
99, blank	Unknown; missing	.	Missing
Other Values		.A	Invalid

## Nebraska

Nebraska			
PAY1_X, PAY2_X and PAY3_X		PAY1	
Value	Description	Value	Description
02	Medicare	1	Medicare
04	Medicaid	2	Medicaid
12	Medicaid		

01	Commercial Insurance	3	Private Insurance
03	Commercial Insurance		
08	Commercial Insurance		
11	Commercial Insurance		
13	Commercial Insurance		
14	Commercial Insurance		
09	Self-pay	4	Self-pay
--	--	5	No charge
05	Worker's Compensation	6	Other
06	Champus/Champva		
07	Other Federal and State Programs		
10	Other		
Blank	Missing	.	Missing
Any values not documented by the data source		.A	Invalid

## Utah

In Utah, hospitals report plan-specific expected payer codes. The data organization that provides the Utah source files to HCUP (the Office of Health Care Statistics, Utah of Department of Health) maps the plan-specific payer codes into grouped payer categories. The data source reports that self-pay/uninsured are not identified very effectively since the original data are mostly based on billing information and they do not have any way to determine whether the payer declined to pay. There is a field for "patient as payer" on the source file, but it is not reliably coded and is only submitted by a small number of hospitals. HCUP receives only the grouped payer code.

Utah			
(Valid beginning in 1998)			
PAY1_X, PAY2_X and PAY3_X		PAY1 and PAY2	
Value	Description	Value	Description
01	Medicare	1	Medicare
02	Medicaid	2	Medicaid
04	Blue Cross/Blue Shield	3	Private Insurance
05	Other commercial	3	Private Insurance
06	Managed care (HMO and PPO)	3	Private Insurance

07	Self pay	4	Self-pay
--		5	No charge
03	Other government	6	Other
08	Industrial and Worker's compensation		
09	Unclassified		
12	Other		
13	Children's Health Insurance Plan (CHIP)		
10, 99, Blank	Unknown, Not reported, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

Utah			
(Valid for 1997)			
PAY1_X, PAY2_X and PAY3_X		PAY1 and PAY2	
Value	Description	Value	Description
01	Medicare	1	Medicare
02	Medicaid	2	Medicaid
04	Blue Cross/Blue Shield	3	Private Insurance
05	Other commercial		
06	Managed care (HMO and PPO)		
07	Self pay	4	Self-pay
--		5	No charge
03	Other government	6	Other
08	Industrial and Worker's compensation		
09	Unclassified		
12	Other		
10, 99, Blank	Unknown, Not reported, Missing	.	Missing
Any values not documented by the data source		.A	Invalid

## PAY1\_X - Expected primary payer, as received from data source

### General Notes

PAY1\_X retains the expected primary payer as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Two HCUP data elements contain uniformly coded information about the expected primary payer:

- PAY1 has general categories for Medicare, Medicaid, private insurance, and other payers.
- PAY1\_N has more detailed categories for private insurance and other payers. PAY1\_N is only available in the 1988-1997 HCUP databases. This data element is discontinued beginning in the 1998 data because of the difficulty of coding the information uniformly across States.

Information on the definition of the source values contained in PAY1\_X and how the source values are recoded into the HCUP uniform variable PAY1 is available under the note for expected primary payer PAY1.

PAY1\_X is included in the NIS beginning in 1998.

### Uniform Values

Variable	Description	Value	Value Description
PAY1_X	Expected primary payer, as received from data source	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element PAY1.

## PAY2 - Expected secondary payer, uniform

### General Notes

PAY2 indicates the expected secondary payer (Medicare, Medicaid, private insurance, etc.). To ensure uniformity of coding across data sources, PAY2 combines detailed categories in the more general groups. For example,

- Medicare includes both fee-for-service and managed care Medicare patients.
- Medicaid includes both fee-for-service and managed care Medicaid patients.
- Private insurance (PAY2 = 3) includes Blue Cross, commercial carriers, and private HMOs and PPOs.
- Other (PAY2 = 6) includes Worker's Compensation, CHAMPUS, CHAMPVA, Title V, and other government programs.

In the 1988-1997 data, the data element PAY2\_N provides more detailed categories for private insurance and other payers. This data element is discontinued beginning in the 1998 data because of the difficulty of coding the information uniformly across States.

The HCUP data element PAY2\_X retains the expected primary payer as provided by the data source.

Because the coding of expected primary and secondary payer is the same, information on the coding of PAY2 is available under the note for expected primary payer (PAY1).

### Uniform Values

Variable	Description	Value	Value Description
PAY2	Expected secondary payer, uniform	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element PAY1.

## PAY2\_X - Expected secondary payer, as received from data source

### General Notes

PAY2\_X retains the expected secondary payer as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Two HCUP data elements contain uniformly coded information about the expected secondary payer:

- PAY2 has general categories for Medicare, Medicaid, private insurance, and other payers.
- PAY2\_N has more detailed categories for private insurance and other payers. PAY2\_N is only available in the 1988-1997 HCUP databases. This data element is discontinued beginning in the 1998 data because of the difficulty of coding the information uniformly across States.

Because the coding of expected primary and secondary payer is the same, information on the coding of PAY2\_X is available under the note for expected primary payer (PAY1).

PAY2\_X is included in the NIS beginning in 1998.

### Uniform Values

Variable	Description	Value	Value Description
PAY2_X	Expected secondary payer, as received from data source	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element PAY1.

## PAY3\_X - Expected tertiary payer, as received from data source

### General Notes

PAY3\_X retains the expected tertiary payer as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific. There are no HCUP data elements that contain uniformly coded information about the expected tertiary payer.

Because the coding of expected primary and tertiary payer is the same, information on the coding of PAY3\_X is available under the note for expected primary payer (PAY1).

### Uniform Values

Variable	Description	Value	Value Description
PAY3_X	Expected tertiary payer, as received from data source	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element PAY1.



## PAYER1\_X - Expected primary payer identifier, plan specific

### General Notes

PAYER1\_X retains the expanded, detailed expected primary payer plan codes provided by the data source. PAY1\_X contains payer categories (e.g., commercial insurance); more detailed, plan-specific codes are reported in PAYER1\_X (e.g., AETNA and United Healthcare). The original values have not been recoded into uniform HCUP values and are source-specific.

### Uniform Values

Variable	Description	Value	Value Description
PAYER1_X	Expected primary payer identifier, plan specific	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

#### Maryland

Beginning in 2003, HCUP retained the managed care payer information on the AS/ED files. PAYER1\_X includes the plan name of the managed care payer. This includes the health maintenance organizations (HMO), managed care organizations (MCO), and provider sponsored organizations (PSO). Source definitions are

<u>Code</u>	<u>Description</u>
01	AETNA Health Plan Atlantic
02	CapitalCare (Blue Cross National Capital Area)
03	CFS Health Group (Carefirst, Freestate, Potomac Health)
04	Chesapeake Health Plan
05	CIGNA Healthcare MidAtlantic Inc.
06	Columbia Medical Plan
07	Delmarva Health Plan
08	Humana Group Health Plan

09	GWU Health Plans
10	NYL Care (HealthPlus, Inc., Sanus, New York Life Care, New York Life)
11	Kaiser Permanente
12	MAMSI (MDIPA, Optimum Choice, Alliance)
13	Total Health Care
14	U.S. Healthcare
15	Prudential Healthcare Plan - Mid Atlantic
16	Principal Health Care of Mid Atlantic
17	Preferred Health Network of MD
18	Physicians Health Plan Inc.
19	Principal Health\Care of Delaware, Inc.
20	Maryland Physicians Care
21	Helix Family Health
22	JAI Medical
23	Priority Partners
24	United HealthCare
25	New American Health
26	Prime Health
29	Other HMO/MCO/PSO

Source values for "Not Applicable" and "Unknown" are recoded to missing (PAYER1\_X = " ").

## PAYER2\_X - Expected secondary payer identifier, plan specific

### General Notes

PAYER2\_X retains the expanded, detailed expected secondary payer plan codes provided by the data source. PAY2\_X contains payer categories (e.g., commercial insurance); more detailed, plan-specific codes are reported in PAYER2\_X (e.g., AETNA and United Healthcare). The original values have not been recoded into uniform HCUP values and are source-specific.

Information on the definition of the source values contained in PAYER2\_X is available under the variable note for PAYER1\_X.

### Uniform Values

Variable	Description	Value	Value Description
PAYER2_X	Expected secondary payer identifier, plan specific	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element PAYER1\_X.

## PL\_CBSA - Patient location: Core Based Statistical Area (CBSA)

### General Notes

Core-Based Statistical Areas (CBSA) partition counties into three categories: Metropolitan, Micropolitan, and Outside Core-Based Statistical Areas. Metropolitan and Micropolitan areas are composed of a core containing a population nucleus and adjacent communities that have a high degree of integration with the core. In this system, counties with cities or urbanized areas of over 50,000 residents are classified as Metropolitan, while counties with urban areas of 10,000 to 49,999 residents are classified as Micropolitan. Outlying counties are added to one of these urban classes when they are adjacent and when at least 25 percent of their resident labor force commutes to them. Although the remaining, Outside Core-Based Statistical Areas are often considered to be rural, this is not entirely correct, because these counties may include substantial population concentrations.

A county-based system such as CBSA, which attempts to describe the diversity in settlement patterns in a relatively large area by a single number, may not provide an informative depiction. A county may be designated as Metropolitan even though only a small portion is urbanized and the rest is distinctly rural. However, because county boundaries don't change much, every county will be represented by a measure, even after an extended period of time.

CBSA were developed by the Office of Management and Budget (OMB). They are based on population and commuting information from the 2000 census and are defined according to the OMB 2003 Metropolitan definitions. CBSA are an updated replacement for MSA. Additional information about the CBSA classification scheme is available on the Internet at <http://www.ers.usda.gov/briefing/rurality/NewDefinitions/>.

### Uniform Values

Variable	Description	Value	Value Description
PL_CBSA	Patient location: Core Based Statistical Area (CBSA)	0	Non-CBSA
		1	Micropolitan Statistical Area
		2	Metropolitan Statistical Area
		.	Missing

### State Specific Notes

*None*

## PL\_MSA1993 - Patient location: Metropolitan Statistical Area (MSA) 1993

### General Notes

Metropolitan Statistical Areas (MSA) partition counties into two categories: Metropolitan and non-Metropolitan. Metropolitan areas are composed of a core containing a large population nucleus and adjacent communities that have a high degree of integration with the core. In this system, counties with cities or urbanized areas of over 50,000 residents and a total population of at least 100,000 are classified as Metropolitan. Outlying counties meeting a complex set of commuting and population characteristics are also designated Metropolitan. Although the remaining, non-Metropolitan areas are often considered to be rural, this is not entirely correct, because these counties may include substantial population concentrations.

A county-based system such as MSA, that attempts to describe the diversity in settlement patterns in a relatively large area by a single number, may not provide an informative depiction. A county may be designated as Metropolitan even though only a small portion is urbanized and the rest is distinctly rural. However, because county boundaries don't change much, every county will be represented by a measure, even after an extended period of time.

MSA were developed at the Office of Management and Budget (OMB). They are based on population and commuting information from the 1990 census and are defined according to the OMB 1993 Metropolitan definitions. PL\_MSA1993 is included on the HCUP file because of the widespread use of this measure in the past, but it has now been superseded by Core-Based Statistical Areas (CBSA), which are available as PL\_CBSA.

### Uniform Values

Variable	Description	Value	Value Description
PL_MSA1993	Patient location: Metropolitan Statistical Area (MSA) 1993	0	Non-MSA
		1	MSA
		.	Missing

### State Specific Notes

*None*

## PL\_RUCA - Patient location: Rural-Urban Commuting Area (RUCA) Codes

### General Notes

Rural Urban Commuting Areas (RUCA) form a classification scheme that distinguishes urban ZIP Codes by population size and characterizes rural ZIP Codes by their population and the strength of their association with larger urban areas. Rural ZIP Codes are differentiated by three factors: the size of their largest urban community, the proportion of that population regularly commuting to larger urban areas, and the size of the urban destinations.

The thirty categories defined by the full RUCA scheme must generally be aggregated in some manner to avoid excessively small cell sizes. HCUP provides two alternative data elements that have collapsed the RUCAs -- PL\_RUCA10 and PL\_RUCA4. RUCA are defined for 1993 ZIP Codes using population and commuting information from the 1990 census. RUCA provide greater locational precision than other urban-rural schemes available on the HCUP data, but the accuracy of the scheme has been degraded by boundary changes of many ZIP Codes in the intervening years. Urban-rural categorizations are missing for the many ZIP Codes defined after 1993.

RUCA were developed by collaboration between the U.S. Health Resources and Service Administration's Federal Office of Rural Health Policy, the Department of Agriculture's Economic Research Service, and the Washington, Wyoming, Alaska, Montana, & Idaho (WWAMI) Rural Health Research Center. Additional information about this classification scheme is available on the Internet at <http://www.ers.usda.gov/Briefing/Rural/Data/desc.htm> and <http://www.fammed.washington.edu/wwamirhrc/rucas/rucas.html>. For many analyses, a smaller number of categories than those provided by the full RUCA may be more appropriate. Suggested alternatives for collapsing the RUCA are provided at [http://www.fammed.washington.edu/wwamirhrc/rucas/use\\_healthcare.html](http://www.fammed.washington.edu/wwamirhrc/rucas/use_healthcare.html).

### Uniform Values

Variable	Description	Value	Value Description
PL_RUCA	Patient location: Rural-Urban Commuting Area (RUCA) Codes	n.n	RUCA code
		.	Missing

<b>State Specific Notes</b>
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*None*



## PL\_RUCA10 - Patient location: Rural-Urban Commuting Area (RUCA) Codes, ten levels

### General Notes

Rural Urban Commuting Areas (RUCA) form a classification scheme that distinguishes urban ZIP Codes by population size and characterizes rural ZIP Codes by their population and the strength of their association with larger urban areas. Rural ZIP Codes are differentiated by three factors: the size of their largest urban community, the proportion of that population regularly commuting to larger urban areas, and the size of the urban destinations.

PL\_RUCA10 is one method of combining the thirty categories defined by the full RUCA into broader categories. The 10 categories are created by truncating the digit after the decimal in PL\_RUCA. This approach produces ten categories by focusing on the population size of the origins and destinations of the primary commuting flow. The secondary commuting flows that provide additional refinements concerning the connection between areas are discounted.

RUCA are defined for 1993 ZIP Codes using population and commuting information from the 1990 census. RUCA provide greater locational precision than other urban-rural schemes available on the HCUP data, but the accuracy of the scheme has been degraded by boundary changes of many ZIP Codes in the intervening years. Urban-rural categorizations are missing for the many ZIP Codes defined after 1993.

RUCA were developed by collaboration between the U.S. Health Resources and Service Administration's Federal Office of Rural Health Policy, the Department of Agriculture's Economic Research Service, and the Washington, Wyoming, Alaska, Montana, & Idaho (WWAMI) Rural Health Research Center. Additional information about the RUCA classification scheme is available on the Internet at <http://www.ers.usda.gov/Briefing/Rural/Data/desc.htm> and <http://www.fammed.washington.edu/wwamirhrc/rucas/rucas.html>. For many analyses, a smaller number of categories than those provided by the full RUCA may be more appropriate. Alternative methods of collapsing the RUCA are suggested at [http://www.fammed.washington.edu/wwamirhrc/rucas/use\\_healthcare.html](http://www.fammed.washington.edu/wwamirhrc/rucas/use_healthcare.html).

Uniform Values			
Variable	Description	Value	Value Description
PL_RUCA10	Patient location: Rural-Urban	1	Metro core
		2	Metro area, commuting to urban areas

	Commuting Area (RUCA) Codes, ten levels	3	Metro area, low commuting
		4	Large town core (10,000-50,000)
		5	Large town, commuting to large towns
		6	Large towns, low commuting
		7	Small town core (2,500-10,000)
		8	Small town, commuting to small towns
		9	Small town, low commuting
		10	Rural
		.	Missing

<b>State Specific Notes</b>
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*None*

## PL\_RUCA4 - Patient location: Rural-Urban Commuting Area (RUCA) Codes, four levels

### General Notes

Rural Urban Commuting Areas (RUCA) forms a classification scheme that distinguishes urban ZIP Codes by population size and characterizes rural ZIP Codes by their population and the strength of their association with larger urban areas. Rural ZIP Codes are differentiated by three factors: the size of their largest urban community, the proportion of that population regularly commuting to larger urban areas, and the size of the urban destinations.

PL\_RUCA4 is a method recommended by RUCA's developers for combining the thirty categories defined by the full RUCA into a few broader categories suitable for health care analysis. This approach produces four classes by combining categories defined by the population and primary destination of commuting flows of a ZIP Code. This definition is especially sensitive to commuting as a measure of urban influence. If large secondary commuting flows (> 30%) connect it with a more heavily urbanized area, a more urbanized category is assigned than the ZIP Code's population alone would dictate.

RUCA are defined for 1993 ZIP Codes using population and commuting information from the 1990 census. RUCA provide greater locational precision than other urban-rural schemes available on the HCUP data, but the accuracy of the scheme has been degraded by boundary changes of many ZIP Codes in the intervening years. Urban-rural categorizations are missing for the many ZIP Codes defined after 1993.

RUCA were developed by collaboration between the Health Resources and Service Administration's Federal Office of Rural Health Policy, the Department of Agriculture's Economic Research Service, and the WWAMI Rural Health Research Center. Additional information about the RUCA classification scheme is available on the Internet at <http://www.ers.usda.gov/Briefing/Rural/Data/desc.htm> and <http://www.fammed.washington.edu/wwamirhrc/rucas/rucas.html>. For many analyses, a smaller number of categories than those provided by the full RUCA may be more appropriate. A discussion of this and alternative methods of collapsing the RUCA is provided at [http://www.fammed.washington.edu/wwamirhrc/rucas/use\\_healthcare.html](http://www.fammed.washington.edu/wwamirhrc/rucas/use_healthcare.html).

Uniform Values			
Variable	Description	Value	Value Description
PL_RUCA4	Patient location: Rural-Urban	1	Urban
		2	Large town (rural)

	Commuting Area (RUCA) Codes, four levels	3	Small town (rural)
		4	Isolated rural
		.	Missing

<b>State Specific Notes</b>
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*None*

## PL\_RUCC - Patient location: Rural-Urban Continuum (RUCC) Codes

### General Notes

Rural-Urban Continuum Codes (RUCC) subdivides counties into 10 categories distinguished by population size in census-defined urbanized areas and by adjacency to metropolitan areas. To be adjacent, counties must be contiguous and have at least 2% of the resident labor force commuting to a central metropolitan county.

A county-based system such as RUCC, which attempts to describe the diversity in settlement patterns in a relatively large area by a single number, may not provide an accurate depiction. However, because county boundaries don't change much, every county will be represented by a measure, even after an extended period of time.

RUCC were developed at the U.S. Department of Agriculture's, Economic Research Service, as a refinement of the Office of Management and Budget (OMB) Metropolitan Statistical Area (MSA) definition. They are based on population and commuting information from the 1990 census and the OMB 1993 Metropolitan definitions. Additional information about the RUCC classification scheme is available on the Internet at <http://www.ers.usda.gov/briefing/rurality/RuralUrbCon>.

Uniform Values			
Variable	Description	Value	Value Description
PL_RUCC	Patient location: Rural-Urban Continuum (RUCC) Codes	0	Metro-Central counties of metro areas, population >= 1 million
		1	Metro-Fringe counties of metro areas, population >= 1 million
		2	Metro-Central counties of metro areas, population 250,000 to 1 million
		3	Metro-Counties of metro areas, population < 250,000
		4	Non-Metro - Urban population of 20,000 or more, adjacent to a metro area
		5	Non-Metro - Urban population of 20,000 or more, not adjacent to a metro area
		6	Non-Metro - Urban population of 2,500 to 19,999, adjacent to a metro area

		7	Non-Metro - Urban population of 2,500 to 19,999, not adjacent to a metro area
		8	Non-Metro - Completely rural or less than 2,500 urban population, adjacent to a metro area
		9	Non-Metro - Completely rural or less than 2,500 urban population, not adjacent to a metro area
		.	Missing

<b>State Specific Notes</b>
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*None*

## PL\_RUCC2003 - Patient location: Rural-Urban Continuum (RUCC) Codes, 2003

<b>General Notes</b>
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The 2003 version of the Rural-Urban Continuum Codes (RUCC) subdivide counties into 9 categories distinguished by population size in census-defined urbanized areas and by adjacency to metropolitan areas. To be adjacent, counties must be contiguous and have at least 2% of the resident labor force commuting to a central metropolitan county.

A county-based system such as RUCC, which attempts to describe the diversity in settlement patterns in a relatively large area by a single number, may not provide an accurate depiction. However, because county boundaries don't change much, every county will be represented by a measure, even after an extended period of time.

RUCC were developed at the U.S. Department of Agriculture's, Economic Research Service, as a refinement of the Office of Management and Budget (OMB) Core-Based Statistical Area (CBSA) definition. They are based on population and commuting information from the 2000 census and the OMB 2003 CBSA definitions. Additional information about the RUCC classification scheme is available on the Internet at <http://www.ers.usda.gov/briefing/rurality/RuralUrbCon/>.

Uniform Values			
Variable	Description	Value	Value Description
PL_RUCC2003	Patient location: Rural-Urban Continuum (RUCC) Codes, 2003	1	Metro - Counties in metro areas of 1 million population or more
		2	Metro - Counties in metro areas of 250,000 to 1 million population
		3	Metro - Counties in metro areas of fewer than 250,000 population
		4	Non-Metro - Urban population of 20,000 or more, adjacent to a metro area
		5	Non-Metro - Urban population of 20,000 or more, not adjacent to a metro area
		6	Non-Metro - Urban population of 2,500 to 19,999, adjacent to a metro area
		7	Non-Metro - Urban population of 2,500 to 19,999, not adjacent to a metro area

		8	Non-Metro - Completely rural or less than 2,500 urban population, adjacent to a metro area
		9	Non-Metro - Completely rural or less than 2,500 urban population, not adjacent to a metro area
		.	Missing

<b>State Specific Notes</b>
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*None*



## PL\_UIC - Patient location: Urban influence codes

### General Notes

Urban Influence Codes (UIC) emphasizes the relationship of outlying counties to major metropolitan areas. Counties are subdivided into nine categories distinguished by three features: population size in census-defined urbanized areas, adjacency to metropolitan areas, and the size of those adjacent communities. To be adjacent, counties must be contiguous and have at least 2% of the resident labor force commuting to a central metropolitan county.

A county-based system such as UIC, which attempts to describe the diversity in settlement patterns in a relatively large area by a single number, may not provide an accurate depiction. However, because county boundaries don't change much, every county will be represented by a measure, even after an extended period of time.

UIC were developed at the U.S. Department of Agriculture's Economic Research Service, as a refinement of the Office of Management and Budget (OMB) Metropolitan Statistical Area (MSA) definition. They are based on population and commuting information from the 1990 census and from the OMB 1993 Metropolitan definitions. Additional information about the UIC classification scheme is available on the Internet at <http://www.ers.usda.gov/Briefing/Rurality/UrbanInf/>.

Uniform Values			
Variable	Description	Value	Value Description
PL_UIC	Patient location: Urban influence codes	1	Metro-Large, metro area with $\geq$ 1 million residents
		2	Metro-Small, metro area with $<$ 1 million residents
		3	Non-Metro - Adjacent to large metro area and contains city of $\geq$ 10,000 residents
		4	Non-Metro - Adjacent to large metro area and contains city of $<$ 10,000 residents
		5	Non-Metro - Adjacent to small metro area and contains city of $\geq$ 10,000 residents
		6	Non-Metro - Adjacent to small metro area and contains city of $<$ 10,000 residents
		7	Non-Metro - Not adjacent to metro area and contains city of $\geq$ 10,000 residents

		8	Non-Metro - Not adjacent to metro area and contains town of 2,500 - 9,999 residents
		9	Non-Metro - Not adjacent to metro area and contains town with < 2,500 residents
		.	Missing

<b>State Specific Notes</b>
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*None*

## PL\_UIC2003 - Patient location: Urban Influence Codes, 2003

### General Notes

The 2003 version of the Urban Influence Codes (UIC) emphasizes the relationship of outlying counties to major metropolitan areas. Counties are subdivided into 12 categories distinguished by three features: population size in census-defined urbanized areas, adjacency to metropolitan or micropolitan areas, and the size of those adjacent communities. To be adjacent, counties must be contiguous and have at least 2% of the resident labor force commuting to a central metropolitan county.

A county-based system such as UIC, which attempts to describe the diversity in settlement patterns in a relatively large area by a single number, may not provide an accurate depiction. However, because county boundaries don't change much, every county will be represented by a measure, even after an extended period of time.

UIC were developed at the U.S. Department of Agriculture's Economic Research Service, as a refinement of the Office of Management and Budget (OMB) Core-Based Statistical Area (CBSA) definition. They are based on population and commuting information from the 2000 census and the OMB 2003 CBSA definitions. Additional information about the UIC classification scheme is available on the Internet at <http://www.ers.usda.gov/briefing/Rurality/UrbanInf/>.

Uniform Values			
Variable	Description	Value	Value Description
PL_UIC2003	Patient location: Urban Influence Codes, 2003	1	Metro - Large metro area of 1 million residents or more
		2	Metro - Small metro area of less than 1 million residents
		3	Non-Metro - Micropolitan adjacent to large metro
		4	Non-Metro - Noncore adjacent to large metro
		5	Non-Metro - Micropolitan adjacent to small metro
		6	Non-Metro - Noncore adjacent to small metro with own town
		7	Non-Metro - Noncore adjacent to small

			metro no own town
		8	Non-Metro - Micropolitan not adjacent to a metro area
		9	Non-Metro - Noncore adjacent to micro with own town
		10	Non-Metro - Noncore adjacent to micro with no own town
		11	Non-Metro - Noncore not adjacent to metro or micro with own town
		12	Non-Metro - Noncore not adjacent to metro or micro with no own town
		.	Missing

<b>State Specific Notes</b>
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*None*

## PL\_UR\_CAT4 - Patient Location: Urban-Rural 4 Categories

### General Notes

PL\_UR\_CAT4 is a four category urban-rural designation for the patient's county of residence. The categorization is a simplified adaptation of the 2003 version of the Urban Influence Codes (UIC). The 12 categories of the UIC are combined into four broader categories that differentiate between large and small metropolitan, micropolitan, and a non-urban residual as follows:

PL_UR_CAT4			
2003 UIC Value			
Value	Description	Value	Description
1	Large metropolitan areas with at least 1 million residents	1	Metro - Large metro area of 1 million residents or more
2	Small metropolitan areas with less than 1 million residents	2	Metro - Small metro area of less than 1 million residents
3	Micropolitan areas	3	Non-Metro - Micropolitan adjacent to large metro
3	Micropolitan areas	5	Non-Metro - Micropolitan adjacent to small metro
3	Micropolitan areas	8	Non-Metro - Micropolitan not adjacent to a metro area
4	Non-urban	4	Non-Metro - Noncore adjacent to large metro
4	Non-urban	6	Non-Metro - Noncore adjacent to small metro with own town
4	Non-urban	7	Non-Metro - Noncore adjacent to small metro no own town
4	Non-urban	9	Non-Metro - Noncore adjacent to micro with own town
4	Non-urban	10	Non-Metro - Noncore adjacent to micro with no own town
4	Non-urban	11	Non-Metro - Noncore not

			adjacent to metro or micro with own town
4	Non-urban	12	Non-Metro - Noncore not adjacent to metro or micro with no own town

Uniform Values			
Variable	Description	Value	Value Description
PL_UR_CAT4	Patient Location: Urban-Rural 4 Categories	1	Large metropolitan areas with at least 1 million residents
		2	Small metropolitan areas with less than 1 million residents
		3	Micropolitan areas
		4	Non-urban
		.	Missing

State Specific Notes
<i>None</i>

## PL\_UR\_CAT5 - Patient Location: Urban-Rural 5 Categories

### General Notes

PL\_UR\_CAT5 (five category urban-rural designation) is a simplified, five category adaptation of the 2003 version of the Urban Influence Codes (UIC). The 12 categories of the UIC are combined into five broader categories that differentiate between large and small metropolitan, micropolitan, and a non-urban residual. The non-urban group are further subdivided between those adjacent to a metropolitan or micropolitan area, and those that are isolated from urban influences.

### Uniform Values

Variable	Description	Value	Value Description
PL_UR_CAT5	Patient Location: Urban-Rural 5 Categories	1	Large metropolitan areas with at least 1 million residents
		2	Small metropolitan areas with less than 1 million residents
		3	Micropolitan areas
		4	Non-urban areas adjacent to a metropolitan or micropolitan area
		5	Non-urban areas, not adjacent to a metropolitan or micropolitan area
		.	Missing

### State Specific Notes

*None*

## PNUM\_R - Person number (re-identified)

### General Notes

PNUM\_R is specific to patients (persons) so that multiple admissions by the same patient can be linked within and across institutions.

Because of a change in the algorithm for creating a person number, patients cannot be tracked from before 2003 to after 2003. In HCUP data prior to 2003, a synthetic person number (PNUM\_S), created using fixed-key encryption, was available. Starting in data year 2003, a reidentification number (PNUM\_R) was used. PNUM\_R includes an arbitrarily chosen, identifying number that is unique to the person identifier provided to HCUP.

PNUM\_R should not be used for analyses without first consulting summary statistics on:

- Frequencies of the number of discharges and the number of different hospitals per nonmissing PNUM\_R.
- State-level counts of the number of unique nonmissing PNUM\_Rs, the number of discharges associated with these PNUM\_Rs, the ratio of these two numbers (discharges/person), and the number of discharges without a PNUM\_R.

### Uniform Values

Variable	Description	Value	Value Description
PNUM_R	Person number (re-identified)	9(n)	Person number
		.	Missing

### State Specific Notes

#### Utah

Utah supplied source-encrypted social security numbers as person numbers. These identifiers are encrypted again during HCUP processing (PNUM\_R). Three-digit codes may indicate:

- newborns who have not obtained a SSN,
- patients who have no SSN, and
- patients who choose not to provide his/her SSN.



## PNUM\_S - Synthetic person number

### General Notes

Beginning in 2003, this data element is called PNUM\_R.

PNUM\_S is specific to patients (persons) so that multiple admissions by the same patient can be linked within and across institutions.

PNUM\_S should not be used for analyses without first consulting summary statistics on:

- Frequencies of the number of discharges and the number of different hospitals per nonmissing PNUM\_S.
- State-level counts of the number of unique nonmissing PNUM\_Ss, the number of discharges associated with these PNUM\_Ss, the ratio of these two numbers (discharges/person), and the number of discharges without a PNUM\_S.

PNUM\_S contains a fixed-key (one-to-one) encryption of the supplied person number (PNUM), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:;'\*@\" are retained in the encrypted value but not in the same location.
- Leading zeros are retained. If the data source codes the same person number inconsistently (sometimes with leading zeros and sometimes with leading blanks), the HCUP person numbers are different.
- When the PNUM in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, PNUM\_S is the same.

Beginning in the 1993 data, the person numbers were checked for null characters. If null characters were found, they were replaced by blanks before the number was encrypted. Since this conversion was not done in prior years of HCUP data, the encrypted person numbers from 1993 on may not match those in earlier years. However, null characters are rarely included.

Uniform Values			
Variable	Description	Value	Value Description
PNUM_S	Synthetic person number	17(a)	Person number
		Blank	Missing

<b>State Specific Notes</b>
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**Utah**

Utah supplied source-encrypted social security numbers as person numbers. These identifiers are encrypted again during HCUP processing (PNUM\_S). Three-digit codes may indicate:

- newborns who have not obtained a SSN,
- patients who have no SSN, and
- patients who choose not to provide his/her SSN.

## PRn - Procedure

### General Notes

In the HCUP inpatient databases, the first listed procedure (PR1) is usually the principal procedure. In the HCUP outpatient databases, the first listed procedure (PR1) may not be the principal procedure; it may just be the first listed procedure on the record.

The original value of the ICD-9-CM first listed procedure (PR1), whether blank or coded, is retained in the first position of the procedure vector. Starting at the first secondary procedure (PR2), the procedures are shifted during HCUP processing to eliminate blank secondary procedures. For example, if PR2 and PR4 contain nonmissing procedures and PR3 is blank, then the value of PR4 is shifted into PR3. Secondary procedures are never shifted into the first listed position (PR1).

Procedures are compared to a list of ICD-9-CM codes valid for the discharge date. Anticipation of or lags in response to official ICD-9-CM coding changes are permitted for discharges occurring within a window of time around the official ICD-9-CM coding changes (usually October 1). Prior to 1998 data, a six months window (three months before and three months after) is allowed. Beginning in the 1998 data, a six month window (three months before and three months after) is allowed. For example, the code for Bone Marrow Transplant changed from "410 " to "4100" as of October 1, 1988. Under HCUP validation procedures, "410" is classified as valid for discharges as late as December 31, 1988, and "4100" is classified as valid for discharges as early as July 1, 1988.

Procedures are compared to the sex of the patient (EPR03 beginning in the 1998 data and ED2nn prior to 1998 data) and the patient's age (EAGE05 beginning in the 1998 data and ED5nn prior to 1998 data) for checking the internal consistency of the record.

How invalid and inconsistent codes are handled varies by data year.

- Beginning in the 1998 data, invalid and inconsistent procedures are masked directly. Validity flags are not included on the HCUP record. Clinical Classifications Software (CCS) data elements are coded with respect to the procedure.

	Invalid Procedure	Inconsistent Code
The value of PRn	"invl"	"incn"
PRCCSn	Set to invalid (.A).	Set to inconsistent (.C)

- Prior to 1998 data, invalid and inconsistent procedures are retained on the record. Validity flags (PRVn) indicate invalid, inconsistent procedure codes. Clinical Classifications Software (CCS) data elements use the former name (PCCHPRn). The CCS was formerly known as the Clinical Classifications for Health Policy Research (CCHPRn). The procedure related data element are coded as follows:

	Invalid Procedure	Inconsistent Code
The value of PRn	Unchanged	Unchanged
PRVn	Set to 1	Set to inconsistent (.C)
PCCHPRn	Set to invalid (.A).	Retained (values 1-260)

The validity flags (PRVn) need to be used in connection with any analysis of the procedures (PRn).

Uniform Values			
Variable	Description	Value	Value Description
PRn	Procedure	nnnn	Procedure code
		Blank	Missing
		invl	Invalid: beginning with 1998 data, EPR02
		incn	Inconsistent: beginning with EAGE05, EPR03

State Specific Notes
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## Nebraska

Nebraska supplied procedure codes in a field of length 7. Only the first four characters contained in the left-justified source field were used to assign the HCUP procedure codes.

## PRCCSn - Clinical Classifications Software (CCS): procedure classification

<b>General Notes</b>
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Clinical Classifications Software (CCS) consists of 231 procedure categories. This system is clinically based on ICD-9-CM codes. All procedure codes are classified.

PRCCSn is coded as follows:

- 1 to 231 if the procedure code (PRn) is valid by the HCUP criteria. The HCUP criteria for procedure validation allows a year window (six months before and six months after) around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes.
- PRCCSn is missing (.), if there is no procedure code (PRn = " ").
- PRCCSn is set to invalid (.A), if the procedure code (PRn) is invalid by the HCUP criteria (EPR02).
- PRCCSn is set to inconsistent (.C), if the procedure code (PRn) is inconsistent with age (EAGE05) or sex of the patient (EPR03).

In HCUP databases before 1998, this data element is called PCCHPRn.

### Labels

Labels for CCS categories are provided as an ASCII file in HCUP Tools: Labels and Formats.

### Formats

Formats to label CCS categories are documented in HCUP Tools: Labels and Formats. A format is also available to map CCS codes into a few broad classes of conditions based on ICD-9-CM chapters.

Uniform Values			
Variable	Description	Value	Value Description
PRCCSn	Clinical Classifications Software (CCS): procedure classification	1 - 231	CCS procedure class
		.	No procedure code
		.A	Invalid procedure code: beginning with 1998 data, EPR02
		.C	Inconsistent: beginning with 1998 data,

			EAGE05, EPR03
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<b>State Specific Notes</b>
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*None*

## PRDAYn - Number of days from admission to procedure n

### General Notes

The day on which the procedure is performed (PRDAYn) is calculated from the procedure date (PRDATEn) and the admission date (ADATE) with the following exceptions:

- PRDAYn is set to the supplied day of principal procedure if the procedure day cannot be calculated (ADATE and/or PRDATEn is missing or invalid). Note: the supplied day of procedure is used only if it distinguishes between a procedure performed on the first day (procedure day = 0) and no procedure day (procedure day is missing).
- PRDAYn is missing (.) if the procedure day cannot be calculated and the supplied procedure day is missing.
- PRDAYn is invalid (.A) if the procedure day cannot be calculated and the supplied procedure day is nonnumeric.
- If the data source does not supply either admission date (ADATE) and procedure date (PRDATEn), or the day of procedure, then beginning in the 1998 data PRDAYn is not present on the HCUP files. In the 1988-1997 data, PRDAYn is retained on the HCUP files and is set to unavailable from source (.B).
- PRDAYn is inconsistent (.C) if
  - there is a day of procedure without a coded procedure (ED7nn), or
  - the day of procedure is not during the stay (EPRDAY01 beginning in the 1998 data and ED8nn in the 1988-1997 data).

Edit checks ED7nn are only performed on the 1988-1997 data. Beginning in the 1998 data, the procedure date without a coded procedure is discarded.

The procedure date vector (PRDATEn) is shifted with the ICD-9-CM procedure codes (PRn) when the procedure vector is packed.

Some sources do not require procedure dates/days for minor or diagnostic procedures which are considered UHDDS class 3 and class 4 procedures. The UHDDS system grouped ICD-9-CM procedure codes into four classes differentiated by impact on either the well-being of the patient or on the health care system. The criteria used to classify procedures included procedural risk, anesthetic risk, and the need for highly trained personnel, special facilities or special equipment. The classes are:

- Class 1: Surgical
- Class 2: Significant procedure (date required)

- Class 3: Significant procedure (date not required)
- Class 4: Minor procedures not normally coded on inpatient data.

PRDAY1 is present on the NIS from 1988 onward; secondary procedures (PRDAY2-15) are present on the NIS beginning in 1998.

Uniform Values			
Variable	Description	Value	Value Description
PRDAYn	Number of days from admission to procedure n	-4 - -1	Days prior to admission
		0	Day of admission
		1 - LOS+3	Days after admission
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: beginning with 1998 data, EPRDAY01; in 1998-1997 data, ED7nn, ED8nn

State Specific Notes
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### Maine

Only the calculated day of procedure could be used to assign PRDAYn because Maine did not supply procedure days.

### Nebraska

Only the calculated day of procedure could be used to assign PRDAYn because Nebraska did not supply day of procedure.



## PRMONTHn - Month of procedure

### General Notes

Month of procedure (PRMONTHn) is derived from the procedure date (PRDATEn). If PRDATEn is missing, then PRMONTHn is missing (.). If PRDATEn is invalid, then PRMONTHn is invalid (.A).

### Uniform Values

Variable	Description	Value	Value Description
PRMONTHn	Month of procedure	1-12	Procedure month
		.	Missing
		.A	Invalid

### State Specific Notes

*None*

## PRYEARN - Year of procedure

### General Notes

Year of procedure (PRYEARN) is derived from the procedure date (PRDATEn). If PRDATEn is missing, then PRYEARN is missing (.). If PRDATEn is invalid, then PRYEARN is invalid (.A).

### Uniform Values

Variable	Description	Value	Value Description
PRYEARN	Year of procedure	yyyy	Procedure year
		.	Missing
		.A	Invalid

### State Specific Notes

*None*

## PSTATE - Patient State postal code

### General Notes

PSTATE indicates the two-character state postal code (e.g., "CA" for California) for the patient's residence. If the data source provided the state of the patient's residence, then PSTATE is assigned to the reported state. Otherwise, PSTATE is assigned by mapping the patient's ZIP Code to a state.

### Uniform Values

Variable	Description	Value	Value Description
PSTATE	Patient State postal code	aa	Postal code
		Blank	Missing

### State Specific Notes

*None*

## PSTCO - Patient state/county FIPS code

### General Notes

The patient State/county FIPS code (PSTCO) is coded from county supplied by the data source only when that information was not derived from the patient's zip code. Nonnumeric values are set to invalid (.A).

### Uniform Values

Variable	Description	Value	Value Description
PSTCO	Patient state/county FIPS code	nnnnn	State/County FIPs Code
		.	Missing
		.A	Invalid

### State Specific Notes

#### Maryland

Maryland reported patient county codes for Maryland residents only. Residents of other states were classified by state, but not county. During HCUP processing, a missing county code of 000 was assigned for out-of-state (non-Maryland) patients:

<u>PSTCO</u>	<u>State</u>
10000	Delaware
11000	Washington, D.C.
24000	Maryland (county not specified)
42000	Pennsylvania
51000	Virginia
54000	West Virginia

## PSTCO2 - Patient state/county FIPS code, possibly derived from ZIP Code

### General Notes

PSTCO2 (Patient State and County 2) provides the most complete enumeration of patient state and county FIPS codes available on this file. As such, it is the variable that should be used to link other county-based data to the HCUP discharge files.

PSTCO2 contains the county coded in PSTCO, when the patient reported a county of residence. When PSTCO is missing, county is imputed, when possible, from the patient ZIP Code (ZIP) variable. ZIP Codes were translated into counties by assigning the county located at the center of the ZIP Code area, as of 2001, from a translation list provided by Claritas.

### Uniform Values

Variable	Description	Value	Value Description
PSTCO2	Patient state/county FIPS code, possibly derived from ZIP Code	nnnnn	State/county FIPS code
		.	Missing

### State Specific Notes

*None*

## RACE - Race

### General Notes

HCUP coding includes race and ethnicity in one data element (RACE). If the source supplied race and ethnicity in separate data elements, ethnicity takes precedence over race in setting the HCUP value for race.

Two HCUP data elements contain source-specific information about the race and ethnicity of the patient.

- RACE\_X retains information on the race of the patient as provided by the data source.
- HISPANIC\_X retains information on the Hispanic ethnicity as provided by the data source.

Not all data sources provide information on race (RACE\_X) and ethnicity (HISPANIC\_X).

### Uniform Values

Variable	Description	Value	Value Description
RACE	Race	1	White
		2	Black
		3	Hispanic
		4	Asian or Pacific Islander
		5	Native American
		6	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)

### State Specific Notes

## Massachusetts

Massachusetts			
RACE_X		RACE	
Value	Description	Value	Description
1	White	1	White
2	Black	2	Black
4	Hispanic	3	Hispanic
3	Asian	4	Asian or Pacific Islander
5	American Indian	5	Native American
6	Other	6	Other
9, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

## Maryland

Beginning in 2003, we combine Maryland Emergency Department (ED) source data with Ambulatory Surgery (AS) source data for processing. The AS source data contains the HISPANIC\_X data element, but the ED source data does not. However, when the data is split into SASD and SEDD files, according to HCUP guidelines, the SEDD file contains some records (from the AS source data) with HISPANIC\_X values.

Maryland did not report Hispanic ethnicity as a separate variable or category of race. Hispanic ethnicity (RACE = 3) is not coded. The source documentation available for Maryland did not indicate which race code(s) were used for Hispanic ethnicity.

Maryland			
RACE_X		RACE	
Value	Description	Value	Description
1	White	1	White
2	African American	2	Black
--		3	Hispanic
3	Asian or Pacific Islander	4	Asian or Pacific Islander
4	American Indian, Eskimo, Aleut	5	Native American
5	Other	6	Other

9	Unknown	.	Missing
Blank	Missing		
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

## Utah

Utah			
(Beginning in 2003)			
RACE_X		RACE	
Value	Description	Value	Description
4	White	1	White
3	Black	2	Black
If HISPANIC_X=1		3	Hispanic
2	Asian or Pacific Islander	4	Asian or Pacific Islander
1	American Indian or Alaskan Native	5	Native American
5	Other	6	Other
6, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
HISPANIC_X			
1		Spanish/Hispanic origin	
2		Non-Spanish/Non-Hispanic	
In 2003, Utah changed their race coding from White, Non-White, White-Hispanic, and Non-White-Hispanic to the more common White, Black, Hispanic, Asian, Native American, and Other. This caused the number of reported Hispanics to decrease.			

Utah			
(Prior to 2003)			
RACE_X		RACE	
Value	Description	Value	Description
W	White, non-Hispanic origin	1	White
--		2	Black



WH	White, Hispanic origin	3	Hispanic
NW	Non-white, Hispanic origin		
--		4	Asian or Pacific Islander
--		5	Native American
NH	Non-white, non-Hispanic origin	6	Other
UK, Blank	Unknown, Missing	.	Missing
Any values not documented by the data source		.A	Invalid
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

## RACE\_X - Race, as received from data source

### General Notes

RACE\_X retains information on the race of the patient as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Two HCUP data elements contain other information about the race of the patient:

- HISPANIC\_X retains information on the Hispanic ethnicity as provided by the data source.
- RACE contains uniformly coded information about the race and ethnicity of the patient. The data element RACE should be used when analyzing race across data sources.

### Uniform Values

Variable	Description	Value	Value Description
RACE_X	Race, as received from data source	n(a)	State specific coding - See the "State Specific Notes" section for details

### State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element RACE.

## REVCODE - Line item revenue code as received from source

### General Notes

Line item revenue center codes specify a specific accommodation, ancillary service, or billing calculation. Data organizations that report line item revenue center codes use UB-92 definitions as defined by the National Uniform Billing Committee. Line item revenue codes (REVCODE) are retained as provided by the data source. No edit checks are performed on this data element during HCUP processing.

REVCODE is contained in a line item charge detail file. There may be multiple observations in the file with the same revenue code for a discharge record. To identify the total charge and units of service to specific revenue centers, the line item charge (CHARGE) and unit detail (UNITS) for a discharge should be summarized by revenue code (REVCODE) and the HCUP variable KEY which uniquely identifies a discharge. KEY can also be used to merge the detail charge information onto the discharge record in the Core file.

### Uniform Values

Variable	Description	Value	Value Description
REVCODE	Line item revenue code as received from source	nnnn	Revenue Code
		Blank	Missing or Invalid

### State Specific Notes

*None*

## REVCDn - Revenue code

### General Notes

Revenue center codes specify a specific accommodation, ancillary service, or billing calculation. Many states use the codes defined by the UB-92, but some states have developed their own coding scheme. Line item revenue center codes specify a specific accommodation, ancillary service, or billing calculation. States Data organizations that report line item revenue center codes use UB-92 definitions as defined by the National Uniform Billing Committee. Revenue codes (REVCDn) are retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific. No validity checks are performed.

### Uniform Values

Variable	Description	Value	Value Description
REVCDn	Revenue code	nnnn	Revenue Code
		Blank	Missing or Invalid

### State Specific Notes

#### Maryland

Revenue codes (REVCDn) identify the revenue center to which the detailed charges (CHGn) and units of service (UNITn) apply, but not to the CPT codes in CPTn. For example, the revenue center in REVCD1 is associated with the charges specified in CHG1 and the units of service specified in UNIT1.

Maryland uses the UB-92 definitions of revenue centers. Source documentation specifies that charges should not include Part B physician charges or charges not regulated by the Maryland Health Services Cost Review Commission (for example, telephone service, television charges or private duty nursing charges). No documentation was provided that specifies the disallowed revenue codes.

#### Nebraska

Revenue codes (REVCDn) identify the revenue center to which the detailed charges (CHGn) and units of service (UNITn) apply, as well as CPT codes in CPTn. For example, CHG1 pertains to the revenue center coded in REVCD1 and the units of

service specified in UNIT1 for a specified service CPT1. For example, the revenue center in REVCD1 is associated with the charges specified in CHG1 and the units of service specified in UNIT1. Nebraska uses the UB-92 definitions of revenue centers.

## SERVDAY - Line item days from admission date

### General Notes

Days from admission date (SERVDAY) is calculated by subtracting the line item service date provided by the data source from the admission date. If the calculated day is negative or greater than 3 years (1095 days), then the day is set to invalid (.A).

### Uniform Values

Variable	Description	Value	Value Description
SERVDAY	Line item days from admission date	0-1095 (3 years)	Days from Admission
		.	Missing
		.A	Invalid

### State Specific Notes

#### Maine

Maine provided the information on the date of service for each line item charge detail record. The number of days from admission was calculated by subtracting the admission date from the service date. If the date was missing or an invalid date, the day of service is missing. The original service dates are not retained on the HCUP database.

## STATE\_AS - State indicator of ambulatory surgery record

### General Notes

STATE\_AS is used to identify ambulatory surgery (AS) records. A value of 1 indicates that the statewide data source has designated the record as AS. A value of 0 marks records that are not identified as AS by the data source. A missing value implies that the state does not identify AS records.

### Uniform Values

Variable	Description	Value	Value Description
STATE_AS	State indicator of ambulatory surgery record	1	Record meets state Ambulatory Surgery criteria
		0	Record does not meet state Ambulatory Surgery criteria
		.A	Invalid
		.	Missing

### State Specific Notes

*None*

## STATE\_ED - State indicator of emergency department record

### General Notes

STATE\_ED is used to identify emergency department (ED) records. A value of 1 indicates that the statewide data source has designated the record as ED. A value of 0 marks records that are not identified as ED by the data source. A missing value implies that the state does not identify ED records.

### Uniform Values

Variable	Description	Value	Value Description
STATE_ED	State indicator of emergency department record	1	Record meets state Ambulatory Surgery criteria
		0	Record does not meet state Ambulatory Surgery criteria
		.A	Invalid
		.	Missing

### State Specific Notes

*None*



## STATE\_OS - State indicator of observation stay record

### General Notes

STATE\_OS is used to identify observation stay (OS) records. A value of 1 indicates that the statewide data source has designated the record as OS. A value of 0 marks records that are not identified as OS by the data source. A missing value implies that the state does not identify OS records.

### Uniform Values

Variable	Description	Value	Value Description
STATE_OS	State indicator of observation stay record	1	Record meets state Observation Stay criteria
		0	Record does not meet state Observation Stay criteria
		.A	Invalid
		.	Missing

### State Specific Notes

*None*

## **SURGSPEC - Primary surgeon specialty, as received from source**

### **General Notes**

Beginning in 2001, this data element is called MDSPEC2.

The primary surgeon's specialty (SURGSPEC) is retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

### **Uniform Values**

<b>Variable</b>	<b>Description</b>	<b>Value</b>	<b>Value Description</b>
SURGSPEC	Primary surgeon specialty, as received from source	n(a)	State specific coding - See the "State Specific Notes" section for details

### **State Specific Notes**

*None*

## TOTCHG - Total charges, cleaned

<b>General Notes</b>
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TOTCHG contains the edited total charges. The original value provided by the data source is retained in the data element TOTCHG\_X. How total charges are edited depends on the year of the data.

In the 1988-1997 HCUP databases, the following edits are applied to total charges (TOTCHG):

- Values are rounded to the nearest dollar; and
- Zero charges are set to missing (.);
- Negative charges are set to invalid (.A); and
- For HCUP inpatient databases, if charges per day (TOTCHG/LOS) are unjustifiably low (ED911) or high (ED921), then TOTCHG is set to inconsistent (.C).
- For HCUP outpatient databases, if total charges are excessively low (ED912) or high (ED922), then TOTCHG is set to inconsistent (.C). (SASD)

Beginning in the 1998 HCUP databases, the following edits are applied to total charges (TOTCHG):

- Values are rounded to the nearest dollar; and
- Zero charges are set to missing (.);
- If total charges are excessively low (ETCHG01) or high (ETCHG02), then TOTCHG is set to inconsistent (.C). The limits for excessively low and high total charges vary for inpatient and outpatient databases.

Generally, total charges (TOTCHG and TOTCHG\_X) do not include professional fees and non-covered charges. If the source provides total charges with professional fees, then the professional fees are removed from the charge during HCUP processing. In a small number of HCUP databases, professional fees can not be removed from total charges because the data source cannot provide the information. In these rare cases, the HCUP data element PROFEE, that identifies which records have professional fees included in the total charge, is included on the HCUP database.

Emergency department charges incurred prior to admission to the hospital may be included in total charges (TOTCHG and TOTCHG\_X). Medicare requires a bundled bill for Medicare patients admitted to the hospital through the emergency department. Other payers may or may not have similar requirements.

A few states have a large number of discharges (20%-30%) with total charges less than \$25. HCUP edit check TCHG01 sets TOTCHG to inconsistent (.C) on these records. An investigation of this situation reveals no specific pattern. The low values generally occur in all hospitals, but may be more pronounced in a handful of hospitals. The discharges with low total charges are commonly associated with simple diagnoses or procedures (e.g., attention to surgical dressing/suture, otitis media, acute URI, acute pharyngitis, limited or comprehensive interview, and skin suture). They do not occur for one particular payer type and do not appear to be copay amounts. Please consult the state-specific Data Quality Reports available under Summary Statistics.

Emergency department charges incurred prior to admission to the hospital may be included in total charges (TOTCHG and TOTCHG\_X). Medicare requires a bundled bill for Medicare patients admitted to the hospital through the emergency department. Other payers may or may not have similar requirements.

Uniform Values			
Variable	Description	Value	Value Description
TOTCHG	Total charges, cleaned	25 - 1 million	Total Charge rounded (In the 1988-1997 data, TOTCHG can be less than 25 and greater than 1 million)
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: beginning with 1998 data, ETCHG01, ETCHG02; in 1998-1997 data, ED911, ED912, ED921, ED922

State Specific Notes
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## Massachusetts

Massachusetts included professional fees in its detailed and total charges, if these were included by the hospital. Hospitals are allowed, but not required, to report these professional fees in the charge fields. Individual facilities decide which professional fees are included and where. There is no way to determine which hospitals did or did not include professional fees.

## Maine

For the 2003 data year, Maine did not provide any charge information on their inpatient or outpatient files. This includes the detail charge records as well as the various total

charge data elements (i.e., total charge, total professional fees, and total ancillary charges). This restriction is due to changes in Maine's data release policies.

Beginning in 2000, total charges (TOTCHG and TOTCHG\_X) were collected from the patient summary record and not the detail charge and revenue code array. Prior to 2000, total charges (TOTCHG and TOTCHG\_X) were identified by revenue code "001" and extracted from the detail charge and revenue code array.

## **Maryland**

Maryland excluded the following from total charges:

- Physician charges and
- Charges not regulated by the Health Services Cost Review Commission (for example, telephone service, television charges or private duty nursing charges).

## **Utah**

Beginning in 2002, professional fees were subtracted from the reported total charges during HCUP processing to make Utah total charges (TOTCHG and TOTCHG\_X) comparable to data from other states. Utah indicates that for the majority of the discharges, the reported total charge includes professional fees. Utah reports the total charge for the UB-92 revenue code "001" if the hospital provides individual revenue codes to the data organization; otherwise the total charge is the hospital-reported total. For the hospitals that do not provide individual revenue codes, Utah does not have any means of determining whether or not professional charges are included. Prior to 2002, professional fees were not subtracted from the total charges (TOTCHG and TOTCHG\_X). To make the total charges comparable to data from other states, professional fees (CHG2) should be subtracted from total charges (TOTCHG and TOTCHG\_X). In all years, it is possible that charges for patient convenience items are included in total charges (TOTCHG and TOTCHG\_X). There is no means of determining whether these charges are included.

## TOTCHG\_X - Total charges, as received from data source

### General Notes

TOTCHG\_X retains the total charge supplied by a data source, including cents and negative values, with the following exceptions:

- Zero charges are set to missing (.); and
- Charges that round to zero are set to missing (.).

TOTCHG\_X has the same value as TOTCHG just before edit checks on total charges are performed. TOTCHG contains the cleaned total charges. TOTCHG\_X contains the original value of total charges.

Generally, total charges (TOTCHG and TOTCHG\_X) do not include professional fees and non-covered charges. If the source provides total charges with professional fees, then the professional fees are removed from the charge during HCUP processing. In a small number of HCUP databases, professional fees can not be removed from total charges because the data source cannot provide the information. In these rare cases, the HCUP data element PROFEE, that identifies which records have professional fees included in the total charge, is included on the HCUP database.

In some cases, only copay amounts, such as \$10 or \$20, may be in the total charges. There is no documentation as to the prevalence of this practice.

Emergency department charges incurred prior to admission to the hospital may be included in total charges (TOTCHG and TOTCHG\_X). Medicare requires a bundled bill for Medicare patients admitted to the hospital through the emergency department. Other payers may or may not have similar requirements.

A few states have a large number of discharges (20%-30%) with total charges less than \$25. HCUP edit check TCHG01 sets TOTCHG to inconsistent (.C) on these records. An investigation of this situation reveals no specific pattern. The low values generally occur in all hospitals, but may be more pronounced in a handful of hospitals. The discharges with low total charges are commonly associated with simple diagnoses or procedures (e.g., attention to surgical dressing/suture, otitis media, acute URI, acute pharyngitis, limited or comprehensive interview, and skin suture). They do not occur for one particular payer type and do not appear to be copay amounts. Please consult the state-specific Data Quality Reports available under Summary Statistics.

Emergency department charges incurred prior to admission to the hospital may be included in total charges (TOTCHG and TOTCHG\_X). Medicare requires a bundled bill for Medicare patients admitted to the hospital through the emergency department. Other payers may or may not have similar requirements.

Uniform Values			
Variable	Description	Value	Value Description
TOTCHG_X	Total charges, as received from data source	+/- 100 million	Total charge (with 2 decimal places)
		.	Missing
		.A	Invalid (nonnumeric or out of range)

State Specific Notes
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## Massachusetts

Massachusetts included professional fees in its detailed and total charges, if these were included by the hospital. Hospitals are allowed, though not required, to report these professional fees in the charge fields. Individual facilities decide which professional fees are included and where. There is no way to determine which hospitals did or did not include professional fees.

## Maine

Beginning in 2000, total charges (TOTCHG\_X) were collected from the patient summary record and not the detail charge and revenue code array. Prior to 2000, total charges (TOTCHG and TOTCHG\_X) were identified by revenue code "001" and extracted from the detail charge and revenue code array.

## Maryland

Maryland excluded the following from total charges:

- Physician charges and
- Charges not regulated by the Health Services Cost Review Commission (for example, telephone service, television charges or private duty nursing charges).

## Utah

Beginning in 2002, professional fees were subtracted from the reported total charges during HCUP processing to make Utah total charges (TOTCHG and TOTCHG\_X) comparable to data from other states. Utah indicates that for the majority of the

discharges, the reported total charge includes professional fees. Utah reports the total charge for the UB-92 revenue code "001" if the hospital provides individual revenue codes to the data organization; otherwise the total charge is the hospital-reported total. For the hospitals that do not provide individual revenue codes, Utah does not have any means of determining whether or not professional charges are included. Prior to 2002, professional fees were not subtracted from the total charges (TOTCHG and TOTCHG\_X). To make the total charges comparable to data from other states, professional fees (CHG2) should be subtracted from total charges (TOTCHG and TOTCHG\_X). In all years, it is possible that charges for patient convenience items are included in total charges (TOTCHG and TOTCHG\_X). There is no means of determining whether these charges are included.



## **TOWN - Patient town of residence, as received from source**

### **General Notes**

Information on the town in which the patient resides (TOWN) is retained as provided by the data source. No edit checks are performed on this data element during HCUP processing.

### **Uniform Values**

<b>Variable</b>	<b>Description</b>	<b>Value</b>	<b>Value Description</b>
TOWN	Patient town of residence, as received from source	n/a	State specific coding - See the "State Specific Notes" section for details

### **State Specific Notes**

#### **Nebraska**

Nebraska provided the full name of the patient's town.

## TransportToHosp - Method of transportation to hospital

### General Notes

The method of transportation to the hospital (TransportToHosp) is retained as reported by data source with two exceptions. Any source-specific value for "unknown" is recoded to missing (.), and invalid characters are set to invalid (.A).

### Uniform Values

Variable	Description	Value	Value Description
TransportToHosp	Method of transportation to hospital	1	Ambulance
		2	Helicopter
		3	Law Enforcement
		4	Walk-in, including public or private transportation
		5	Other
		.	Missing
		A	Unknown

### State Specific Notes

*None*

## UNITn - Units of service

### General Notes

The unit of service (UNITn) is retained as provided by the data source. Negative values are set to invalid (.A). If supplied by the data source, fractional values of units of service (UNIT) are rounded, with any non-zero value less than 1 (0.01-0.99) rounded to 1.

### Uniform Values

Variable	Description	Value	Value Description
UNITn	Units of service	nnnn	Units of Service
		.	Missing
		.A	Invalid

### State Specific Notes

#### Maryland

Detailed charges (CHGn) pertain to identified revenue centers as indicated by the revenue code (REVCDn) and the units of service (UNITn), but not to the CPT procedure codes in CPTn. For example, CHG1 pertains to the revenue center coded in REVCD1 and the units of service specified in UNIT1.

## UNITS - Line item units as received from source

### General Notes

Line item units (UNITS) are retained as provided by the data source. No edit checks are performed on this data element during HCUP processing.

UNITS are contained in a line item charge detail file. There may be multiple observations in the file with the same revenue code for a discharge record. To identify the total charge and units of service to specific revenue centers, the line item charge (CHARGE) and unit detail (UNITS) for a discharge should be summarized by revenue code (REVCODE) and the HCUP variable KEY which uniquely identifies a discharge. KEY can also be used to merge the detail charge information onto the discharge record in the Core file.

### Uniform Values

Variable	Description	Value	Value Description
UNITS	Line item units as received from source	nnnn	Units of Service
		.	Missing
		.A	Invalid

### State Specific Notes

*None*

## YEAR - Calendar year

### General Notes

The discharge year (YEAR) is always coded. In the 1988-1997 HCUP databases, YEAR is two-digits (e.g., if the discharge year is 1990, then YEAR = 90). Beginning in the 1998 HCUP databases, YEAR is four-digits (e.g., 1998).

### Uniform Values

Variable	Description	Value	Value Description
YEAR	Calendar year	yy	2-digit calendar year in 1988-1997 data
		yyyy	4-digit calendar year beginning with 1998 data

### State Specific Notes

#### Utah

If the discharge date was not reported, then the discharge year (YEAR) was assigned during HCUP data processing.

## ZIP - Patient zip code

### General Notes

The patient's zip code (ZIP) is retained as provided by the data source with the following exceptions:

- Foreign zip codes are recoded to indicate Canadian, Mexican, and other or unspecified foreign zip codes.
- Invalid zip codes are identified (ZIP = "A"). In the 1988-1992 HCUP databases, the zip code is validated against a composite list of zip codes valid as of December 1987, 1990, and 1992. Beginning in the 1993 HCUP databases, the zip code is required only to be numeric.
- The zip code for homeless patients is set to missing (ZIP = " ") in the 1988-1999 HCUP databases. Beginning in the 2000 HCUP databases, ZIP is set to "H".

### Uniform Values

Variable	Description	Value	Value Description
ZIP	Patient zip code	nnnnn	Zip codes
		C	Canada
		M	Mexico
		F	Other or unspecified foreign
		H	Homeless (beginning with 2000 data)
		Blank	Missing
		A	Invalid
		B	Unavailable from source (coded 1988-1997 data only)

### State Specific Notes

#### Nebraska

Nebraska does not separately classify Canadian, Mexican, or other foreign zip codes.

## Utah

Utah uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

Utah masks zip codes under the following conditions:

- Patients in Utah or non-Utah zip codes with less than 30 discharges in a calendar year,
- Patients with the Major Diagnosis Code of "Human Immunodeficiency Virus Infection" (value 25), and
- Diagnosis Related Groups "Alcohol/Drug Abuse or Dependence" (values 433-437).

During HCUP processing, the masked zip code is recoded as missing (ZIP = blank).

Utah reports a zip code category for homeless patients. Beginning in 2000, this zip code was assigned to the HCUP category for Homeless (ZIP = "H"). Prior to 2000, this zip code was recoded to blank (ZIP = " ").

## ZIP3 - Patient ZIP Code, first 3 digits

### General Notes

The first three digits of the patient's ZIP Code (ZIP3) provides sufficient information to identify the location of a patient's residence within a broad region within a state. ZIP3 is retained as provided by the data source with the following exceptions:

- Foreign ZIP Codes are recoded to indicate Canadian, Mexican, and other or unspecified foreign ZIP Codes.
- Non-numeric ZIP Codes are identified (ZIP = "A").
- The ZIP Code for homeless patients is set to "H".

### Uniform Values

Variable	Description	Value	Value Description
ZIP3	Patient ZIP Code, first 3 digits	nnn	First 3 digits of patient ZIP Code
		C	Canada
		M	Mexico
		F	Other or unspecified foreign
		H	Homeless
		Blank	Missing
		A	Invalid

### State Specific Notes

*None*



## ZIP\_S - Synthetic patient zip code

### General Notes

ZIP\_S contains a fixed-key (one-to-one) encryption of the patient's residential zip code (ZIP). To prevent inadvertent or intentional identification of specific patients based on the patient's residential zip code, the last 2 digits were encrypted. While it is still possible to identify the state of a patient's residence using the first three unencrypted zip code digits, ZIP\_S does not allow placement of a specific patient within a narrower, zip code-based geography.

If the zip code in the HCUP outpatient surgery databases and the inpatient databases are the same, the synthetic identifier, ZIP\_S is the same.

Users of the encrypted zip code data element are strictly forbidden to identify the actual zip code associated with the encrypted zip code.

The encrypted zip code (ZIP\_S) contains the following special values:

- Canadian, Mexican, and other or unspecified foreign zip codes (ZIP\_S = "C", "M", or "F", respectively).
- Invalid zip codes (ZIP = "A"). In the 1988-1992 HCUP databases, the zip code is validated against a composite list of zip codes valid as of December 1987, 1990, and 1992. Beginning in the 1993 HCUP databases, the zip code is required only to be numeric.
- Homeless patients. In the 1988-1999 HCUP databases, (ZIP\_S = " ") . Beginning in the 2000 HCUP databases, ZIP\_S = "H".

Uniform Values			
Variable	Description	Value	Value Description
ZIP_S	Synthetic patient zip code	nnnnn	Synthetic zip codes
		C	Canada
		M	Mexico
		F	Other or unspecified foreign
		H	Homeless (beginning with 2000 data)
		Blank	Missing
		A	Invalid
		B	Unavailable from source (coded 1988-1997 data only)

<b>State Specific Notes</b>
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**Maine**

Maine does not separately classify Canadian, Mexican, or other foreign zip codes.